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( SCIENTIFIC RESULTS  
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OF THE LATE  
FERDINAND STOLICZKA, PH.D.

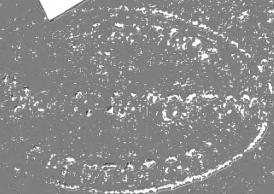
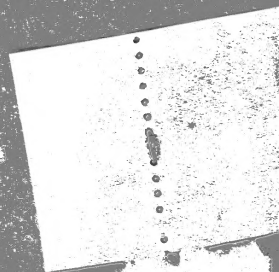
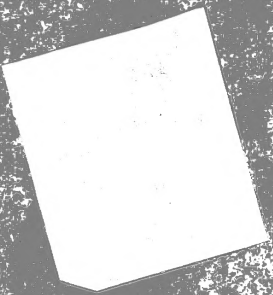
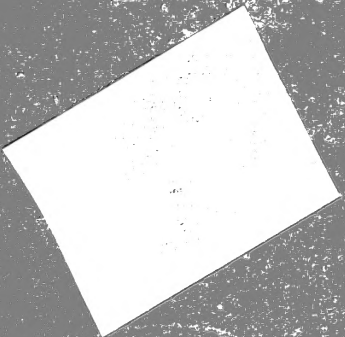
AVES,  
BY  
RICHARD  
R. BOWDLER SHARPE, LL.D., F.L.S., F.Z.S., &c.

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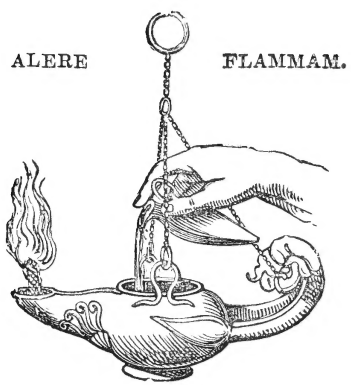
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SCIENTIFIC RESULTS  
OF  
THE SECOND YARKAND MISSION.

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AVES.

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ZOOLOGICAL DEPARTMENT, BRITISH MUSEUM.

IT is much to be regretted that by a series of untoward circumstances this report on the ornithological collections formed by the late Dr. Ferdinand Stoliczka has been so long delayed. The work would have been done by my friend Mr. Allan Hume, and indeed *was* done by him, but during the rebuilding of a portion of his museum at Simla the whole of the MSS., together with other valuable MSS. work of Mr. Hume's, was stolen by a dishonest servant and sold as waste-paper in the bazaar. I therefore brought the collection over with me to England with the rest of the Hume Collection, and but for an unwonted pressure of official work which has fallen to my lot ever since my return from India, I should have completed this report long ago.

By this delay a great injustice has been unavoidably done to the memory of that sterling naturalist Dr. Stoliczka, for the material which he collected was abundant and the series of skins ample. Had he lived to write up his own notes, it is certain that this report would have been one of the most interesting ever published on the birds of Central Asia, but I have done my best to extract from his diary all the notes which appear to me to be of interest to ornithologists. I have gone further in my endeavour to make the present report as useful as possible after the lapse of years which has ensued, and I have included in the list of birds all the species that were obtained by Dr. Henderson and Dr. Scully and recorded in the notes published by those gentlemen. Colonel Biddulph, who was attached to the same expedition as Stoliczka, gave a series of notes in MSS. to Mr. Hume, and these, having luckily escaped the fate which overwhelmed the rest of the MSS., have been incorporated here. The present work, therefore, is an attempt to monograph the labours of the English Expeditions into



Central Asia, and as such will, I think, be useful for future reference. The papers relating to the avifauna of the neighbouring countries of Central Asia have also been consulted and quoted, but it must be understood that I have only endeavoured to reproduce the information which affects the zoo-geographical relations of the ornithology of Eastern Turkestan. Space has not been available for the reproduction of all the interesting notes on the habits and breeding of the species with which the works of Dr. Henderson and Dr. Scully teem, neither have I been able to quote at length the valuable critical remarks published by Mr. Hume in 'Lahore to Yarkand.' These works must therefore be consulted at all points by the student, as also the excellent introduction which Mr. Hume has written in the latter work, to which I feel I can add nothing of importance.

I have to acknowledge the assistance I have received in the determination of the specimens from my colleague Mr. W. R. Ogilvie Grant; and also from Mr. C. Chubb, who has sacrificed much of his time in helping me with the preparation of the synonymy.

Order ACCIPITRES.

Suborder FALCONES.

Fam. VULTURIDÆ.

Genus **VULTUR.**

1. VULTUR MONACHUS.

*Vultur monachus*, L.; Hume, Rough Notes, i. p. 1 (1869); Sharpe, Cat. B. Brit. Mus. i. p. 3 (1874); Scully, Str. F. iv. p. 116 (1876); Dresser, Ibis, 1875, p. 98; Prjev. in Rowley's Orn. Misc. ii. p. 139 (1877); Menzbier, Orn. Turkest. (Severtz. Coll.), p. 2 (1888).  
*Vultur cinereus*, Severtz. Turkest. Jevotn. p. 62 (1873); Zarudn. Ois. Transcasp. p. 31 (1885); Radde, Orn. iii. p. 466 (1887).

Dr. Scully states that this Vulture is found, though rarely, in the hills bordering Eastern Turkestan, and a few stragglers are occasionally seen in the plains. The Turki name is "Salwar."

Fam. FALCONIDÆ.

Subfam. ACCIPITRINÆ.

Genus **CIRCUS.**

2. CIRCUS CYANEUS.

*Circus cyaneus* (L.); Sharpe, Cat. B. Brit. Mus. i. p. 52 (1874); Scully, Str. F. iv. p. 125 (1876); Bidd. Ibis, 1881, p. 42; Scully, ibid. p. 421; Severtz. Ibis, 1883, p. 54; Homeyer & Tancré, MT. orn. Ver. Wien, 1883, p. 82; Scully, J. A. S. Beng. lvi. p. 77 (1887); Sharpe, Trans. Linn. Soc. (2) Zool. v. part 3, p. 66 (1889).

*Strigiceps cyaneus*, Severtz. Turkest. Jevotn. p. 63 (1873); Dresser, Ibis, 1875, p. 109; Prjev. in Rowley's Orn. Misc. ii. p. 154 (1877); Zarudn. Ois. Transcasp. p. 34 (1885); Radde, Orn. iii. p. 472 (1887).

No. 950. Bora, November 4, 1873.—Length 18.25 inches, wing 13.6, tail 9.0, tarsus 2.8; expanse 41.0. Iris golden; bill dark horny; feet golden. Wings reach within 2 inches of end of tail. [Young bird.]

No. 1065. Yarkand, November 21, 1873. "Ach-sā." [An adult male.]

No. 1069. Yarkand, November 21, 1873. "Kara-sā = young of the grey bird." [Young bird.]

Colonel Biddulph writes:—"We found this bird very common all over the more cultivated portions of Yarkand from Karghalik. We never met with it in the desert-tracts, such as those between Yarkand and Kashghar, nor at any elevation in the hills. We saw it the whole time we were in the country from November to May." Specimens were procured by Colonel Biddulph at Maralbashi in January 1874, and at Yangihissar on the 1st of December 1873.

Dr. Stoliczka's diary notes this Harrier as not uncommon near Yarkand in November 1873.

Dr. Henderson does not appear to have met with the species, but Dr. Scully has the following note:—"The Hen-Harrier is a permanent resident in the plains of Kashgharia and breeds there; the nest is said to be placed in long grass jungle. I often observed this bird sailing low, over rush-grown marshes and bare fields, with a wonderfully long-sustained flight.

It never seems to tire, and always appears keenly intent on looking for its prey, every now and then suddenly dropping down among the reeds, as if shot, but soon rising again to resume its hunting. The male bird is called by the Yarkandis 'Kok Sā' (the Blue 'Sā'), and the female 'Kilati Sā,' the word *Sā* being a sort of generic name applied to all Buzzards, Kites, and Harriers, an added second word (usually having reference to colour or shape) marking the species."

In his paper on the birds of the Pamir Range the late Dr. Severtzow says that the Hen-Harrier was seen by him during its migration near the Kara-Kul lake, and was found on the Alai. Immature birds were rather common.

### 3. CIRCUS ÆRUGINOSUS.

*Circus æruginosus* (L.); Sharpe, Cat. B. Brit. Mus. i. p. 69 (1874); Scully, Str. F. iv. p. 126 (1876); Blauf. East. Persia, ii. p. 110 (1876); Bidd. Ibis, 1881, p. 43; Scully, ibid. p. 422; C. Swinh. Ibis, 1882, p. 100; Severtz. Ibis, 1883, p. 54; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 82; Scully, J. A.S. Beng. lvi. p. 78 (1887); Radde, Ornith., iii. p. 472 (1887); Sharpe, Trans. Linn. Soc. (2) Zool. v. part 3, p. 66 (1889).

*Circus rufus*, Severtz. Turkest. Jevotn. p. 63 (1873); Dresser, Ibis, 1875, p. 109; Zarudn. Ois. Transcasp. p. 23 (1885).

No. 727, ♀ juv. Tanksi, September 17, 1873.—Length 21·5 inches, wing 16·3, tail 9·5, tarsus 3·45; expanse 51·0. Iris brown; bill horny black, cere greenish or yellowish green. Closed wing reached within 2 inches of end of tail. [A young bird.]

No. 1021. Yarkand, November 13, 1873. [An interesting specimen emerging from the young into the adult plumage by a moult.]

No. 1528, ♂. Panjah, April 20, 1874.—Length 20·6 inches, wing 16·0, tail 9·5, tarsus 3·6; expanse 51·0. Iris golden; bill bluish black, cere greenish yellow; feet yellow, claws horny black.

Hunting around swamp about  $4\frac{1}{2}$  miles west of Panjah with another specimen quite similar to this one. Both often sat down among the high reeds in the swamp, perhaps making their nest among the reeds. [A fully adult male.]

Dr. Scully writes:—"The Marsh-Harrier is tolerably common in Eastern Turkestan, where it is often seen during the summer hunting over the long rushes and reeds which grow in marshy ground or on the banks of lakes. It was never seen in winter. This species is said to feed chiefly on frogs, rats, and lizards; occasionally also on the Reedling (*Calamophilus biarmicus*). It breeds in Kashgharia, where it is called by the natives *Akbash Sā*, the White-headed 'Sā.'"

Dr. Severtzow, during his exploration of the Pamir, found the Marsh-Harrier during migration near the Kara-Kul in the beginning of September. It was also seen near Ran-Kul in the middle of August; probably young ones come to the Pamir in summer.

### 4. CIRCUS MACRURUS.

*Circus macrurus* (Gm.); Sharpe, Cat. B. Brit. Mus. i. p. 67 (1874); Scully, J. A. S. Beng. lvi. p. 78 (1887).

*Strigiceps pallidus*, Severtz. Turkest. Jevotn. p. 109 (1873); Zarudn. Ois. Transcasp. p. 24 (1885).

*Circus swainsonii*, Dresser, Ibis, 1875, p. 109; Scully, Str. F. iv. p. 125 (1876).

*Circus pallidus*, Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 83.

Dr. Scully believes that he saw this species at Kichik Yailak (12,054 feet) on the 19th of August, but failed to hit the bird. The Kirghiz called it "Boz Sā" (the Grey 'Sā').

Genus **ASTUR**.

5. **ASTUR PALUMBARIUS**.

*Astur palumbarius* (L.) ; Severtz. Turkest. Jevotn. p. 63 ; Dresser, Ibis, 1875, p. 104 ; Scully, Str. F. iv. p. 121 (1876) ; Prjev. in Rowley's Orn. Misc. ii. p. 153 (1877) ; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 82 ; Zarudn. Ois. Transcasp. p. 25 (1885) ; Radde, Orn. iii. p. 472.

Dr. Scully gives an interesting account of the training of the Goshawk for hawking in Central Asia. He says that it is said to live principally near the hills in the neighbourhood of Aksu, and only visits Yarkand about the beginning of winter, when it is supposed to be following the migrating water-fowl. The Turki name is "Karchighah."

Genus **ACCIPITER**.

6. **ACCIPITER NISUS**.

*Astur nesus* (L.) ; Severtz. Turkest. Jevotn. p. 63 (1873) ; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 82 ; Radde, Orn. iii. p. 471 (1887).

*Accipiter nesus* (L.) ; Sharpe, Cat. B. Brit. Mus. i. p. 132 (1874) ; Scully, Str. F. iv. p. 122 (1876) ; Dresser, Ibis, 1875, p. 104 ; Blanf. East. Persia, ii. p. 109 (1876) ; Prjev. in Rowley's Orn. Misc. ii. p. 153 (1877) ; Wardl. Ramsay, Ibis, 1880, p. 47 ; Bidd. Ibis, 1881, p. 41 ; Scully, ibid. p. 409 ; C. Swinh. Ibis, 1882, p. 99 ; Scully, J. A. S. Beng. lvi. p. 78 (1877) ; Zarudn. Ois. Transcasp. p. 25 (1885).

No. 1127. Kashghar, December 10, 1873.

An adult female, identified by Mr. Hume as *A. nesus*, and not as his *A. melaschistus*.

This identification I agree with, as it is not dark enough for the latter species.

No. 829. Upper Karakash, October 1873.

Colonel Biddulph states that he met with *Accipiter melaschistus* in the Sindh valley, but the true *A. nesus* he procured at Sháhidula on the 21st of October, and again in Wakhan.

Dr. Scully observes :—"The Sparrow-Hawk is found in great numbers in the hills south of Yarkand, where it breeds. It visits the plains in considerable numbers in the beginning of winter. It is rather prized for hawking, and is trained to capture Larks, Quail, and Pigeons (*C. ænas*) ; in the hills it is said to hunt Chicore. Two specimens were preserved at Kashghar in November and December, and I have seen others procured from the Karchung valley in May. The Turki name for the Sparrow-Hawk is 'Karghai.'"

Subfam. **BUTEONINÆ**.

Genus **BUTEO**.

7. **BUTEO PLUMIPES**.

*Buteo plumipes*, Hodgs. ; Sharpe, Cat. B. Brit. Mus. i. p. 180 (1874) ; Bidd. Ibis, 1881, p. 42 ; Scully, ibid. p. 421 ; Menzbier, Orn. Turkest. p. 185 (1889).

*Buteo japonicus*, Scully, Str. F. iv. p. 125 (1876).

No. 1404, ♂. Ighiz Yar, March 21, 1873.—Length 20 inches, wing 16·5, tail 9·4, tarsus 3·0 ; expanse 52·0. Iris dark brown ; bill dusky bluish, cere yellow ; feet yellow. Turki name "Sā."

This specimen is in the uniform black plumage which is generally assigned to the adult of *B. plumipes*, and I believe it to be of that species. The size of the foot is one of my chief characters for this determination, although it will be noticed that the length of the tarsus (as measured by Dr. Stoliczka) does exceed the limit of 2·9 inches allowed by Mr. Hume as the maximum for *B. plumipes* ('Rough Notes,' p. 271).



Dr. Stoliczka writes in his diary:—"At Ighiz Yar I also shot a *Buteo*, apparently *B. plumipes*, which I had formerly seen several times, but could not get a shot at. It is a very wary bird."

Dr. Scully shot three females at Yarkand in January. He gives the measurements and soft parts. According to him, it is "common near Yarkand during the winter. A dark specimen was called 'Kara Sā,' the Black *Sā*, but this species was really not discriminated from the preceding species (*B. ferox*). *B. plumipes* was never met with in the plains after the winter was fairly over."

Dr. Scully also records the Common Buzzard (*Buteo vulgaris*) as common during the winter in the neighbourhood of Yarkand; but the Hume Collection did not contain a specimen, and I rather question the identification.

#### 8. BUTEO FEROX.

*Buteo ferox* (Gm.), Sharpe, Cat. B. Brit. Mus. i. p. 176, pl. 8 (1874); Blanf. East. Persia, ii. p. 113 (1876); Scully, Str. F. iv. p. 124 (1876); Wardl. Rams. Ibis, 1880, p. 47; Bidd. Ibis, 1881, p. 42; Scully, ibid. p. 420; C. Swinh. Ibis, 1882, p. 99; Severtz. Ibis, 1883, p. 53; Zarudn. Ois. Transcasp. p. 26 (1885); Scully, J. A. S. Beng. lvi. p. 78 (1887); Radde, Orn. iii. p. 470; Sharpe, Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 66 (1889); Menzbier, Orn. Turkest. p. 204 (1889).

*Buteo leucurus*, Severtz. Turkest. Jevotn. p. 63 (1873); Dresser, Ibis, 1875, p. 103.

*Buteo aquilinus*, Hume & Henders. Lahore to Yark. p. 175 (1873).

Ad. Yarkand, November 8, 1873.

No. 1172. Kashghar, December 21, 1873. "Sā."

No. 1406. Ighiz Yar, March 22, 1874.

No. 1729. Kizil, May 19, 1879.

Dr. Henderson procured a specimen of the sooty form of this Buzzard at Dhurmsala, near Saidábád, on the road from Kashmir to the plains.

Mr. Hume gives some notes on the plumages of the species.

Dr. Scully shot specimens near Yarkand in January and February, and he gives details of the soft parts and measurements. He says that it was very common in the plains of Eastern Turkestan during the winter, and, in common with the other two species of Buzzard found in the country, disappeared in the spring. How well its specific name of *ferox* is justified is illustrated by the following note of Dr. Scully:—"I kept one of these Buzzards alive for some time, and found its disposition anything but gentle; when I went up to it it would throw itself on its back and strike out violently with its claws. It got loose one night in a room in which I had a number of other birds, and committed dreadful havoc, killing at least half a dozen birds, among the number a Kestrel. The Yarkandi shikaris called this Buzzard 'Tokhmak Sā' (the Mallet 'Sā'); but I do not believe they could really distinguish it from the other species of Buzzard."

Dr. Severtzow says:—"This species feeds on different *Arvicolæ* which are common on the Pamir and innumerable on the Alai. It was seen near Ran-Kul in July and August; but I do not know where it breeds. The dark variety of this species (*B. aquilinus*, Hodgs.) is also common enough."

Subfam. *AQUILINÆ*.

Genus **GYPAËTUS**.

#### 9. GYPAËTUS BARBATUS.

*Gypaëtus barbatus* (L.); Hume & Henders. Lahore to Yark. p. 170 (1873); Severtz. Turkest. Jevotn. p. 99 (1873); Dresser, Ibis, 1875, p. 99; Prjev. in Rowley's Orn. Misc. ii. p. 138 (1877); Wardlwa

Ramsay, Ibis, 1880, p. 47; Severtz. Ibis, 1883, p. 52; Zarudn. Ois. Transcasp. p. 30 (1885); Scully, Str. F. iv. p. 116 (1876); Radde, Orn. iii. p. 467 (1887); Menzbier, Orn. Turkest. p. 22 (1888).

Dr. Henderson says that the Laemmergeier was "seen every day from Jamu to the plains of Yarkand and Sanju. It was the only large raptorial bird noticed beyond Leh, and on the Lingzi-thung plateau almost the only living creature except a species of antelope, of which no specimens were obtained. . . . There is usually a pair to be seen near every village in Ladák. From Leh to Sanju the whole route is strewn with dead horses in various stages of desiccation, the climate being too cold and dry to admit of putrefaction: but the Laemmergeier was never observed feeding on these, except on one occasion; this was at Drás, on the 25th of October." His note on the species contains many items of interest.

According to Dr. Scully, "the Laemmergeier was often noticed on the journey through Ladak; but I only saw it once in Eastern Turkestan, viz. on the Sanju Pass and between the Pass and Kichik Yailak, on the 24th September, 1874. The Sanju Pass, though only 16,000 feet above sea-level, is perhaps the most difficult on the road from India to Yarkand, and is strewn on both sides with the carcasses of dead horses. Marmots abound to above Kichik Yailak, and the Bearded Vulture is said to prey on them, besides feeding on carrion. The Turki name of this species is 'Ghiji.'"

Genus **AQUILA.**

10. **AQUILA CHRYSÆTUS.**

*Aquila chrysaëtus* (L.); Sharpe, Cat. B. Brit. Mus. i. p. 235 (1874); Scully, Str. F. iv. p. 123 (1876); Prjev. in Rowley's Orn. Misc. ii. p. 143 (1877); Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 82; Radde, Orn. iii. p. 469 (1887); Menzbier, Orn. Turkest. p. 55 (1888); id. N. Mém. Soc. Imp. Nat. Moscou, tom. xv. livr. v. p. 148 (1888).

*Aquila fulva*, var. *nobilis*, Severtz. Turkest. Jevotn. p. 63 (1873); Dresser, Ibis, 1875, p. 99.

*Aquila nobilis* and *A. daphanea*, Menzbier, Orn. Turkest. pp. 61, 72 (1888).

Dr. Scully writes:—"This species is the celebrated 'Birkut'—the name by which the Golden Eagle is known in Khokand and Western Turkestan generally; in Kashgharia, however, it is called 'Kara-Kush,' *i. e.* black bird. The trained bird is very common in Eastern Turkestan, every governor of a district or town usually having several. It is said to live and breed in the hills south of Yarkand and near Khoten, where the young birds are caught, to be trained for purposes of falconry. A few stragglers occasionally visit the plains in winter. I saw one a few miles from Yarkand in January, and another near Beshkant in February. In the wild state the Eagle's prey is said to consist of the stag, the 'Kik' (*Antelope subgutturosa*), the wild cat, the fox, and the wolf."

A very fine specimen of the Golden Eagle was sent by Dr. Lansdell from the Thian Shan mountains during his recent journey through Central Asia.

Genus **NISAËTUS.**

11. **NISAËTUS PENNATUS.**

*Nisaëtus pennatus* (Gm.); Sharpe, Cat. B. Brit. Mus. i. p. 253 (1874); Bidd. Ibis, 1881, p. 41; Scully, *ibid.* p. 420.

*Aquila pennata*, Severtz. Turkest. Jevotn. p. 63 (1873); Dresser, Ibis, 1875, p. 101; Blauf. East. Persia, ii. p. 112 (1876); Zarudn. Ois. Transcasp. p. 28 (1885).

*Hieraëtus pennatus*, C. Swinh. Ibis, 1882, p. 99.

A young specimen in the uniform brown plumage; but the label with the particulars of capture has been lost.

Colonel Biddulph procured this species in the Nubra Valley in June.

Genus **HALIAËTUS**.12. **HALIAËTUS LEUCORYPHUS**.

*Haliaëtus leucoryphus* (Pall.); Severtz. Turkest. Jevotn. p. 63 (1873); Hume & Henders. Lahore to Yark. p. 175 (1873); Sharpe, Cat. B. Brit. Mus. i. p. 308 (1874); Dresser, Ibis, 1875, p. 99; Scully, Str. F. iv. p. 124 (1876); Blanf. East. Persia, ii. p. 112 (1876); Severtz. Ibis, 1883, p. 53; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 82; Menzbier, Orn. Turkest. p. 41 (1888).

*Haliaëtus macei*, Prjev. in Rowley's Orn. Misc. ii. p. 148 (1877); Zarudn. Ois. Transcasp. p. 27 (1885).

No. 253. Srinagar, August 3, 1873.—Length 32 inches, wing 25, tail 12·25, tarsus 4·0. Iris light brown; bill blackish towards tip; feet waxy white; cere and gape very pale bluish.

Colonel Biddulph procured a specimen at Baramula.

Dr. Henderson states that several specimens of this Eagle were noticed between Yarkand and Karghalik.

Dr. Scully says:—"This bird is well known in Kashgharia, where it is called 'Giyah.' I noticed it on several occasions a few miles from the city of Yarkand, in June and July; and in August at Igarchi, and at Tungtash, about seven miles east of Karghalik. It was always seen in the neighbourhood of water, usually sitting motionless on the bank of a stream or on some mud-cliff near marshy ground. On one occasion I saw it feeding on the carcass of a dead horse, about five miles south of Yarkand. The Yarkandi shikaris say that the 'Giyah' feeds principally on fish and carrion, but that it sometimes strikes Crows and Hares."

"Pallas's Sea-Eagle," writes Dr. Severtzow, "is often seen near the Pamir lakes in August, also near Kara-Kul, Ran-Kul, and Jesehil-Kul. The old birds do not breed every year, but only every second year, in the same manner as *Gypaëtus barbatus* and the large Vultures. In the year in which they do not breed they moult in June, and lead a migratory life until winter, during which period many are seen on the Pamir."

Genus **POLIOAËTUS**.13. **POLIOAËTUS PLUMBEUS**.

*Polioaëtus plumbeus*, Hodgs. J. A. S. Beng. vi. p. 367 (1837).

A specimen of this Sea-Eagle was shot at Baramula by Colonel Biddulph.

Genus **MILVUS**.14. **MILVUS MELANOTIS**.

*Milvus melanotis*, T. & S.; Sharpe, Cat. B. Brit. Mus. i. p. 324 (1874); Scully, Str. F. iv. p. 126 (1876); id. Ibis, 1881, p. 422; Prjev. in Rowley's Orn. Misc. ii. p. 152 (1877); Zarudn. Ois. Transcasp. p. 25 (1855); Menzbier, Orn. Turkest. p. 131 (1889).

*Milvus govinda* (nec Sykes), Hume & Henders. Lahore to Yark. p. 176 (1873); Bidd. Ibis, 1881, p. 44; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 82.

No. 179. Srinagar, July 26, 1873 (*Biddulph*). [Young bird.]

No. 178. Srinagar, July 26, 1873. [Young bird.]

No. 233. Srinagar, July 31, 1873. [An immature bird.]

No. 254. Srinagar, August 3, 1873. "Ghánds." [Young bird.]

No. 255. Srinagar, August 3, 1873. [An immature bird.]

No. 244, ♂. Srinagar, August 2, 1873.—Length 22·5 inches, wing 18·5, tail 10·5, tarsus 2·25; expanse 59·5. Iris pale chocolate-brown; bill black, cere entirely livid; feet pale bluish white, with no trace of yellow. [An immature bird.]

No. 839. Leh, September 6, 1873 (*Dr. Bellew*). [Young bird.]

No. 1414. Sasstekke, March 23, 1874.—Length 22·5 inches, wing 18·25, tail 11·0, tarsus 2·3.

Iris brown; bill black; cere pale yellowish; feet pale leaden white. [An immature bird.]

No. 1719. Yangihissar, April 4, 1874. [An immature bird in moult.]

No. 1574. Panjah, April 26, 1874. [An adult bird.]

I believe all the Kites collected by Dr. Stoliczka to belong to the large race which Mr. Hume called *M. major*. They are certainly not *M. korschun*, which Severtzow records from the Pamir and from Turkestan.

Colonel Biddulph writes:—"Obtained at Kiziljilga, on the Karakash, in October. Elevation over 16,500 feet. In the summer, just as we were leaving Kashghar, I noticed the appearance of a few Kites."

Dr. Scully states that this was the only species of Kite observed in Eastern Turkestan, where it was tolerably common, especially in the plains. It was first noticed by him near Yarkand in April, and the last specimen seen in the country was near Sháhídúla about the end of August. It breeds in Kashgharia, and "is called 'Achah Koyruk Sā' ('the Fork-tailed Kite'), or occasionally 'Mizan Sā' ('the Balance Kite,' in allusion to the manner in which it poises while soaring)."

Genus **PERNIS**.

15. **PERNIS APIVORUS**.

*Pernis apivorus* (L.); Sharpe, Cat. B. Brit. Mus. i. p. 344; Severtz. Turkest. Jevotn. pp. 63, 112; Dresser, Ibis, 1875, p. 102.

No. 840. Sháhídúla, October 20, 1873.

The entire absence of a crest induces me to believe that the present specimen belongs to the European and not to the Indian form. It is, however, so young that it is difficult to tell for certain, as its wing only measures 13·5 inches.

Genus **FALCO**.

16. **FALCO COMMUNIS**.

*Falco communis*, Gm.; Sharpe, Cat. B. Brit. Mus. i. p. 376 (1874).

*Falco peregrinus*, Severtz. Turkest. Jevotn. p. 63 (1873); Dresser, Ibis, 1875, p. 107; Scully, Str. F. iv. p. 117 (1876); Wardlaw Ramsay, Ibis, 1880, p. 47; Bidd. Ibis, 1881, p. 39; Scully, ibid. p. 416; Severtz. Ibis, 1883, p. 54; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 82.

No. 928. Sanju, October 29, 1873. [A young male.]

Dr. Scully obtained a specimen at Yarkand in March, and states that a few stragglers are occasionally seen near the city of Yarkand during the winter. He gives the following note:—"The Yarkandi falconers say that this bird is commonly found near the hills north of Eastern Turkestan in the neighbourhood of Ushturfan, Aksu, and Ili (Kuldja); and that many breed near Maralbashi, the nest being usually placed among reeds! They also add that in the wild state the Peregrine always preys on Ducks, Teal, and various Waders. The male is considered useless for sport, but the female is held in great esteem for the purposes of falconry; it is trained to strike Herons, Geese, Ducks, and Bitterns. The name given to this Falcon in Turkestan is 'Bahri,' an Arabic word meaning 'of the river' or 'of the sea,' thus implying that the Peregrine is a water-haunting species."

Dr. Severtzow says that the species migrates through the Alai and Pamir in a southerly direction in September.



17. *FALCO BABYLONICUS.*

*Falco tscherniaievi*, Severtz. Turkest. Jevotn. pp. 63, 114 (1873).

*Falco barbarus*, Scully, Str. F. iv. p. 118 (1876).

*Falco babylonicus*, Gurney; Hume, Rough Notes, i. p. 79 (1869); Dresser, Ibis, 1875, p. 106; Sharpe, Cat. B. Brit. Mus. i. p. 388 (1874); Scully, Str. F. iv. p. 118 (1876).

Dr. Scully supposed that he got both species of Red-headed Peregrine in Eastern Turkestan, but his specimens are all referable to *F. babylonicus* (*cf.* Gurney, Ibis, 1887, p. 158).

18. *FALCO SUBBUTEO.*

*Falco subbuteo*, L.; Sharpe, Cat. B. Brit. Mus. i. p. 395 (1874); Severtz. Turkest. Jevotn. p. 63 (1873); Dresser, Ibis, 1875, p. 108; Blanf. East. Persia, ii. p. 105 (1876); Bidd. Ibis, 1881, p. 39; Scully, *ibid.* p. 417; Homeyer & Tancré, MT. orn. Ver. Wien, 1883, p. 82; Radde, Orn. iii. p. 468 (1887).

*Hypotriorchis subbuteo*, Hume & Henders. Lahore to Yark. p. 174 (1873); Scully, Str. F. iv. p. 119 (1876); Prjev. in Rowley's Orn. Misc. ii. p. 150 (1877); Zarudn. Ois. Transcasp. p. 29 (1885).

No. 882. Kiwáz, October 26, 1873. [A young bird.]

No. 1748. Yarkand, May 21, 1874. [Adult bird.]

Dr. Henderson found the Hobby not at all uncommon about Yangi Bázár, eight miles from Yarkand; and Dr. Scully says that it is a "seasonal visitant to the plains of Eastern Turkestan, where it breeds. It arrives in the neighbourhood of Yarkand in May, but not in any considerable numbers, and migrates, it is supposed towards India, in October, when the trees begin to lose their leaves. On our return journey to India in August this species was observed on five different occasions at our various halting-stages, but was not seen after leaving Sanju on the 14th of August. The Turki name for the Hobby is 'Jaghalbai.'"

19. *FALCO REGULUS.*

*Falco regulus*, Pall.; Sharpe, Cat. B. Brit. Mus. i. p. 406 (1874).

*Falco aesalon*, Severtz. Turkest. Jevotn. p. 63; Dresser, Ibis, 1875, p. 107; Blanf. East. Persia, ii. p. 105 (1876); Bidd. Ibis, 1881, p. 39; Scully, *ibid.* p. 417; C. Swinh. Ibis, 1882, p. 99; Severtz. Ibis, 1883, p. 54; Homeyer & Tancré, MT. orn. Ver. Wien, 1883, p. 82.

*Lithofalco aesalon*, Scully, Str. F. iv. p. 120 (1876).

*Hypotriorchis aesalon*, Prjev. in Rowley's Orn. Misc. i. p. 151 (1877).

The Merlin was not procured by Dr. Stoliczka himself, but Colonel Biddulph says that he shot one about 16 miles to the east of Yarkand in November; this was the only one seen north of the Karakorum. Dr. Scully writes:—"The Turki name for the Merlin is 'Turumtai,' and it is said to live and breed in the hills of Eastern Turkestan. It visits the plains about Kashghar and Yarkand, in small numbers only, in winter—principally during the months of November and December, I think."

Dr. Severtzow gives the following note on the species in the Pamir range:—"The Merlin was seen at the end of July in the Bash-Alai. It probably breeds in the north Alai range. I found it breeding in the mountains near Vernoe in June 1879, and obtained for my collection a pair, male and female, with three nestlings, which all died soon, though fed on freshly-shot small birds only, which they ate greedily, and which was the food given them by their parents. They were taken too young, being only just out of the egg. Vernoe (43° N.) and Ferghana (39° 45' N.), on the north Alai range, are unusually southern, although

alpine breeding-places. The nest near Vernoe was on a pine (*Pinus schrenkiana*) at a height of 8000 feet above the sea."

Genus **HIEROFALCO.**

20. **HIEROFALCO GYRFALCO.** (Plate I.)

*Hierofalco gyrfalco* (L.) ; Sharpe, Cat. B. Brit. Mus. i. p. 416 (1874).

*Falco gyrfalco*, Homeyer & Tancré, MT. orn. Ver. Wien, 1883, p. 82.

No. 1744, ♀ juv. Yarkand, May 15, 1874.

This is a young bird doubtless, which I expected to prove to be one of the forms of Jerfalcon separated by Dr. Menzbier, but the immaturity of the specimen prevents any exact comparison with the species figured by him. The accompanying Plate by Mr. Keulemans gives a very good portrait of the Yarkand specimen, which, as far as I can see, is not different from European skins of *Hierofalco gyrfalco*. Dr. Stoliczka's diary does not give any particulars of the individual, nor does it state whether the bird had been captured in a wild state or had been used for hawking.

As far as I can see there is no difference between the Yarkand bird and true *H. gyrfalco*, and I cannot understand what *H. uralensis* of Menzbier can be, for the adult white bird figured by him (Orn. Turkest. pl. v.) is undoubtedly *H. candicans* !

21. **HIEROFALCO MILVIPES.**

*Falco milvipes*, Hodgs. in Gray's Zool. Misc. p. 81 (1844), descr. nullâ ; Jerdon, Ibis, 1871 (April), p. 240.

*Falco hendersoni*, Hume, Ibis, 1871 (October), p. 407 ; id. & Henders. Lahore to Yark. p. 171, pl. 1 (1873) ;

Scully, Str. F. iv. p. 117 (1876) ; Prjev. in Rowley's Orn. Misc. ii. p. 149 (1877) ; Severtz. Ibis, 1883, p. 53.

This species I considered in 1874 to be the final stage of plumage of the old *Hierofalco sacer*, but I now think this was a mistake, and am inclined to recognize *H. milvipes* as a good species. Dr. Henderson writes :—"A single specimen, a male, of this species, which Mr. Hume considers to be the Shanghar of Eastern Falconers, was shot on the 14th of September, 1870, at Kitchik Yílák in undulating country just north of the Sanju Pass, and 40 miles from Sanju, where the plains of Yarkand may be said to commence. There are no trees or bushes about ; but the climate here is comparatively moist, and there is abundance of short grass, on the borders of which thousands of the Tibetan Snow-Pheasant (*Tetraogallus tibetanus*) were observed. Other Falcons, apparently of this species, were noticed in the immediate neighbourhood, but it was never seen elsewhere, and only one specimen was obtained."

Dr. Scully obtained a female at Kashghar, November 1874. He adds :—"The Turki name of this bird is 'Aitalgu,' and all competent authorities in such matters in Kashgharia assert positively that it is the female of the famed 'Shunkar.' The bird is rare in Eastern Turkestan, but is said to be a permanent resident and to breed there. I heard that it was occasionally obtained in the Dolan forest-region—in the direction of Aksu ; from the district of Lob ; from the hills near Sanju ; and from the neighbourhood of Karchung, south-west of Yarkand. The 'Shunkar' is the most highly prized of all the Falcons, and whenever one is caught it is at once taken to the Amir, the Dad Khwah of Yarkand, or the Governor of the district ; the 'Aitalgu' is not at all prized, and is considered hardly worth training. An experienced old Yarkandi bird-catcher, in looking at the pictures in my copy of 'Lahore to Yarkand' one day, fixed on the plate of *Falco hendersoni* and said at once that it was a representation of the *Shunkar*. Perfectly white *Shunkar* (albinos) were mentioned to me."

Genus **CERCHNEIS**.22. **CERCHNEIS TINNUNCULUS**.

*Cerchneis tinnunculus* (L.) ; Sharpe, Cat. B. Brit. Mus. i. p. 425 (1874) ; Severtz. Turkest. Jevotn. p. 63 (1873) ; Bidd. Ibis, 1881, p. 40 ; Scully, ibid. p. 418 ; Radde, Orn. iii. p. 468 (1887).

*Tinnunculus alaudarius*, Dresser, Ibis, 1875, p. 108 ; Scully, Str. F. iv. p. 120 (1876) ; Blanf. East. Persia, ii. p. 105 (1876) ; C. Swinh. Ibis, 1882, p. 99 ; Zarudn. Ois. Transcasp. p. 29 (1885) ; Scully, J. A. S. Beng. lvi. p. 79 (1887).

*Falco tinnunculus*, Wardlaw Ramsay, Ibis, 1880, p. 47 ; Severtz. Ibis, 1883, p. 54 ; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 82.

No. 395. Leh, August 30, 1873. [Young female.]

No. 801. Kiziljilga, Karakash Valley, October 3, 1873. [Young male.]

No. 972. Karghalik, November 6, 1873. [Male moulting into adult plumage.]

No. 985. Yarkand, November 9, 1873. [Adult male.]

No. 986. Yarkand, November 9, 1873. [Young female in moult.]

No. 1123. Yapchan, December 3, 1873. "Kukunak Kushkunak." [Adult male.]

No. 1310. Kashghar, February 5, 1874. [Adult female.]

No. 1758. Yarkand, May 20, 1874. [Adult female.]

Colonel Biddulph procured specimens at Kashghar and Maralbashi in January. He states that it was very common in the plains country of Turkestan and in the low hills near Sanju ; he did not notice it on the Pamir, but procured it again down in Wakhan.

Dr. Henderson states that the Kestrel was very common in Yarkand, and he also obtained it at Kargil, in Ladak, in June.

According to Dr. Scully the Kestrel is a permanent resident in Eastern Turkestan. It is common throughout the plains during the whole year, and observed in the hills of the country also, up to an elevation of about 12,000 feet. The Turki name for the Kestrel is 'Kurganak.'

Dr. Severtzow says that the Kestrel is often seen in summer on the Pamir and Alai.

Suborder **PANDIONES**.Genus **PANDION**.23. **PANDION HALIAËTUS**.

*Pandion fluviatilis*, Severtz. Turkest. Jevotn. p. 63 (1873).

*Pandion haliaëtus* (L.) ; Sharpe, Cat. B. Brit. Mus. i. p. 449 (1874) ; Dresser, Ibis, 1875, p. 102 ; Blanf. East. Persia, ii. p. 114 (1876) ; Prjev. in Rowley's Orn. Misc. ii. p. 146 (1877) ; Scully, Ibis, 1881, p. 420 ; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 82 ; Zarudn. Ois. Transcasp. p. 27 (1885).

No. 182. Srinagar, July 27, 1873.

Suborder **STRIGES**.Fam. **BUBONIDÆ**.Genus **SCOPS**.24. **SCOPS BRUCII**. (Plate II.)

*Ephialtes brucii*, Hume, Str. F. i. p. 8 (1873).

*Scops brucii* (Hume) ; Sharpe, Cat. B. Brit. Mus. ii. p. 62 (1875) ; Bidd. Ibis, 1881, p. 47 ; Scully, ibid. p. 426.

No. 800. Karatagh Lake, October 10, 1873.—Length 7·6 inches, wing 6·25, tail 3·0, tarsus 1·4 ; expanse 21·5 ; bill from front 0·63, from gape 0·75. Iris sulphur-yellow ; bill and feet greenish horny. Temperature at night 25° below zero. Caught at night on the ground near my tent.

No. 842. Sháhídúla, October 21, 1873.

No. 1459. Panjah, April 13, 1874.

Nos. 842 and 1459 are of the usual pale type and are matched by others in the Hume Collection from various parts of the north-west of the Indian Peninsula. The British Museum contains eight specimens of this rare species of Scops Owl, including the young bird. The only difference perceptible in the series is that some specimens have a more ochreous tinge, while some are greyer. The specimen from the Karatágh Lake is a distinct link between *Scops brucii* and *S. giu*, as it has a good deal of rufous about it, and approaches *S. giu* from the Persian Gulf.

Colonel Biddulph states that he shot a specimen between Sirhud and Panjah in Wakhan.

The specimens of this species now in the Museum are as follows:—

- ♂ ad. Boonji, near Gilgit, September 20, 1876 (*Col. J. Biddulph*).—Wing 6·3 inches.
- ♂ ad. Gilgit, March 23, 1880 (*Dr. J. Scully*).—Wing 6·3 inches.
- ♂ ad. Hyderabad, Sind, December 16, 1878 (*S. Doig*).—Wing 6·0 inches.
- ♂ ad. Chaman, S. Afghanistan, April 23, 1880 (*J. A. Murray*).—Wing 6·0 inches.
- ♀ juv. Chaman, June 3, 1880 (*H. E. Barnes*). (*Carine bactriana*, Barnes, Str. F. ix. p. 215.)
- Ad. Sultanpur, Gurgaon, December 7, 1877 (*W. N. Chill*).—Wing 6·3 inches.
- ♂ ad. Ahmednuggur, January 20, 1870 (*H. J. Bruce*). Type of species.—Wing 6·35 inches.
- ♂ ad. Rahuri, Ahmednuggur, February 1876 (*S. B. Fairbank*).—Wing 6·1 inches.
- Ad. Rahuri, Admednuggur (*S. B. Fairbank*).—Wing 6·4 inches.

#### Genus **BUBO**.

##### 25. **BUBO TURCOMANUS**.

*Bubo maximus*, var. *turcomanus*, Severtz. Turkest. Jevotn. p. 111 (1873).

*Bubo ignavus* (nec Forst.) ; Dresser, Ibis, 1875, p. 111.

*Bubo turcomanus* (Eversm.) ; Sharpe, Cat. B. Brit. Mus. ii. p. 17 (1875) ; Severtz. Ibis, 1883, p. 55 ; Zarudn. Ois. Transcasp. p. 22 (1885).

*Bubo maximus*, Scully, Str. F. iv. p. 129 ; Radde, Ornith., iii. p. 473 (1887).

*Strix bubo*, Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 83.

Dr. Scully's specimens were brought to him alive, and he gives an interesting note concerning them. He observes:—"This fine Owl, called in Turki *Hui kush* (the 'hui' bird), was first seen in open waste ground, near Beshkant, on the 4th of February. It was attended by a flock of Crows, who seemed to be tormenting it, flying after it and surrounding it when settled on the ground, but always keeping at a respectful distance. The bird was again met with at Tungtash, near Karghalik, in August." Mr. Hume notes that the Turkestan specimens of the Eagle-Owl belong to the eastern pale form of the species, *B. turcomanus*, Eversm.

#### Genus **NYCTEA**.

##### 26. **NYCTEA NIVEA**.

*Surnia nivea* (L.) ; Severtz. Turkest. Jevotn. p. 63 (1873).

*Nyctea scandiaca*, Dresser, Ibis, 1875, p. 110 ; Sharpe, Cat. B. Brit. Mus. ii. p. 125 (1875).

*Nyctea nivea*, Scully, Str. F. iv. p. 128 (1876).

*Strix nivea*, Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 83.

A specimen was brought alive to Dr. Scully at Kashghar, in December. The Turki name is 'Bai Kush' (the Noble bird).



Genus **ASIO**.27. **ASIO OTUS**.

*Asio otus* (L.); Sharpe, Cat. B. Brit. Mus. ii. p. 227 (1875); Dresser, Ibis, 1875, p. 112; Bidd. Ibis, 1881, p. 45; Scully, ibid. p. 424; id. J. A. S. Beng. lvi. p. 79 (1887); Sharpe, Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 67 (1889).

*Otus vulgaris* (Flem.); Blanf. East. Persia, ii. p. 116 (1876); Scully, Str. F. iv. p. 127 (1876).

*Ægiolius otus*, Severtz. Turkest. Jevotn. p. 63 (1873).

*Strix otus*, Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 83.

No. 922. Sanju, November 1, 1873.

Nos. 1050, 1052. Yarkand, November 24, 1873.

No. 1126. Kashghar, December 10, 1873.

Colonel Biddulph also obtained a specimen about 10 miles east of Yarkand on the 19th of November. He says it was never seen in the hills, but was common in the plains wherever there was any bush-jungle. Dr. Scully states that the Long-eared Owl was common about Kashghar and Yarkand during the winter; about the beginning of April it migrated, probably towards the forests of Maralbashi and Aksu, where he was told that it was known to breed. In Turki it is called 'Mashak Yapalak,' or Cat-Owl.

Genus **CARINE**.28. **CARINE BACTRIANA**. (Plate III.)

*Athene noctua orientalis*, Severtz. Turkest. Jevotn. p. 63 (1873).

? *Carine glaux*, Dresser, Ibis, 1875, p. 110.

*Carine plumipes*, Swinh.; Sharpe, Cat. B. Brit. Mus. ii. p. 137 (1875).

*Athene bactriana*, Scully, Str. F. iv. p. 130 (1876).

*Carine bactriana* (Hutton); Barnes, Str. F. ix. p. 215 (1880); C. Swinh. Ibis, 1882, p. 100; Scully, J. A. S. Beng. lvi. p. 79 (1887); Sharpe, Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 67 (1889).

*Athene plumipes meridionalis*, Prjev. in Rowley's Orn. Misc. ii. p. 155 (1877); Menzbier in Zarudn. Ois. Transcasp. p. 22 (1885).

No. 1209. Kashghar, January 18, 1874.—Length 8·8 inches, wing 6·7, tail 1·3; expanse 23·0. Iris pure sulphur-yellow; bill greenish yellow; feet greenish, claws bluish horny black; cere pale greenish white and swollen; nostrils dark green. Closed wings reach within  $\frac{3}{4}$  inch of end of tail.

No. 1381. Kashghar, March 8, 1874.

In Dr. Stoliczka's diary is a note:—"Yangishahr. On the 6th of February Oomra saw an *Athene* carrying grass for its nest in the hole of a bank of a river."

Colonel Biddulph procured a male at Kashghar on the 5th of March, 1874. He writes:—"Shot in the wall of the fort. It was common about Yarkand. I saw a small Owl, that I believe to have been this species, between Tashkurgan and the Pamir."

Dr. Scully observes:—"I first got this species at Kashghar in November, two birds having been brought to me alive. This little Owl was common near Kashghar and Yarkand during the whole winter and was observed at Sanju in August. It is a permanent resident and breeds in the country, living principally in holes in mud-banks and feeding on mice, lizards, and beetles. I have seen it flying about freely in the daytime, but its habits are reported to be chiefly nocturnal. The Turki name is 'Chaghundak.'"

## Order PASSERIFORMES.

## Suborder P A S S E R E S.

## Family CORVIDÆ.

Genus **TRYPANOCORAX**, Sundev.29. **TRYPANOCORAX FRUGILEGUS.**

*Corvus frugilegus*, Linn. Syst. Nat. i. p. 156 (1766); Severtz. Turkest. Jevotn. p. 63 (1873); Dresser, Ibis, 1875, p. 237; Scully, Str. F. iv. p. 157 (1876); Blanford, East. Persia, ii. p. 263 (1876); Biddulph, Ibis, 1881, p. 77, 1882, p. 284; Scully, ibid. p. 571; C. Swinhoe, Ibis, 1882, p. 111; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 88; Radde, Orn. Cauc. p. 125 (1884); Oates, Faun. Brit. Ind., Birds, i. p. 18 (1889).

*Trypanocorax frugilegus*, Sharpe, Cat. B. Brit. Mus. iii. p. 9 (1877); id. Trans. Linn. Soc. (2) Zool. v. p. 68 (1889).

No. 979. Yarkand, November 8, 1873.—Length 18·2 inches, wing 12·3, tail 7·0, tarsus 2·0; expanse 35·5. Iris dark brown; bill black; feet black. “Kara Kargha” (*Turki*). [A nearly adult bird, with the face and throat not quite denuded of the black downy plumes.]

No. 1170. Kashghar, December 20, 1873. [An immature bird with completely feathered face.]

No. 1280. Kashghar, January 26, 1874. [Fully adult.]

No. 1277. Kashghar, January 26, 1874. [Not fully mature, as it has the throat still retaining a little fluffy down.]

No. 1276. Kashghar, January 26, 1874. [In worn plumage with fully feathered face—probably a young bird of the preceding year.]

No. 1585. Langarkish, April 26, 1874. [In very rusty and worn plumage, with feathered face, the throat showing signs of denudation. Both this and the preceding specimen would probably not have nested this year.]

According to Dr. Scully the Rook is only a winter visitor to Kashghar, disappearing “from the vicinity of Yarkand in the beginning of April, migrating to the north, where it is said to breed in the hills near Aksu. The Turki name is ‘Portumchuk Kargha,’ *i. e.* ‘The Rotten-beaked Crow,’ in allusion to the rough scabrous skin covering the base of the bill.” The Rook is plentiful in winter in North-western India.

Genus **CORVUS.**30. **CORVUS CORAX.**

*Corvus corax*, Linn. Syst. Nat. i. p. 155 (1766); Severtz. Turkest. Jevotn. p. 63 (1873); Dresser, Ibis, 1875, p. 236; Tacz. Bull. Soc. Zool. France, i. p. 172 (1876); Blanf. East. Persia, ii. p. 261 (1876); Prjev. in Rowley’s Orn. Misc. ii. p. 283 (1877); Sharpe, Cat. B. Brit. Mus. iii. p. 14 (1877); Severtz. Ibis, 1883, p. 55; Zarudn. Bull. Soc. Nat. Mosc. 1885, p. 59; Radde, Orn. iii. p. 473 (1887); Oates, Faun. Brit. Ind., Birds, i. p. 14 (1889).

*Corvus thibetanus*, Hume & Henders. Lahore to Yark. p. 234 (1873); Scully, Str. F. iv. p. 155 (1876).

*Corvus lawrencii*, Hume; Swinh. Ibis, 1882, p. 111.

No. 463. Kargil, August 19, 1873.—Wing 17·9 inches.

No. 527. Snurla, on the Indus, August 24, 1873.

No. 597. Leh, August 30, 1873.—Wing 19·3 inches.

No. 613. Leh, September 4, 1873.—Wing 18·4 inches.

No. 1383. Kalti Ailák, March 1, 1874.—Wing about 17 inches.

This is the specimen recorded in the Diary (p. 33), and which Stoliczka thought was so small as to be certainly *C. lawrencii* of Hume; but it is in worn and moulting plumage, and consequently the measurements are defective.

No. 1541. Aktásh, May 5, 1874.—Wing imperfect, about 17 inches.

Ad. Karakorum-brangsa, June 15, 1874.—Length 25 inches, wing 18·3, tail 10·0, tarsus 2·8; expanse 54. Iris dark brown; bill and feet black.

Mr. Oates has drawn attention (*l. c.*) to the difference of size in the throat-hackles of the upland Raven, and his conclusions are decidedly confirmed by the series collected by Dr. Stoliczka. All the Ravens obtained in Leh are of the form called *C. tibetanus*, but those from the neighbourhood of Yarkand are of the smaller race, which Hume called *C. lawrencii*. Dr. Stoliczka seems to have noticed this himself, and on the whole question Mr. Oates's remarks should be studied, though he agrees with me (Cat. B. iii. p. 14) that it is impossible to separate the Alpine Raven as a species. Further notes on the dimensions of Indian and Central Asiatic Ravens will be found in Mr. Hume's account in 'Lahore to Yarkand' and in Dr. Scully's paper (*l. c.*).

Colonel Biddulph says that *C. tibetanus* was found throughout Ladak, not with the camp, but quite by themselves on the plain, and generally in pairs. He could not remember ever seeing a Raven in Yarkand. He observes:—"On the Pamir, at an elevation of 13,500 feet, I saw a flock of *C. tibetanus* of about twenty birds, and shot four. Between Kizil and Ak Robat, in the desert, I saw several flying overhead. Coming back I found them very tame and plentiful (this was in June) nearly at the top of the Karakorum, 18,500 feet."

Dr. Henderson's note is as follows:—"The Tibet Raven accompanied the camp throughout, from the first entry into Ladák right through Yarkand, almost to the city itself, and back again. It was extremely familiar and bold, and it was impossible to leave anything eatable about which it did not attempt to steal. Even milk-pots it would deliberately upset to obtain a sup of the contents. At the greatest altitudes and through the most absolute deserts at least half a dozen accompanied the camp, some doubtless of the very same birds thus travelling the whole way from Leh to the vicinity of the city of Yarkand. When the camp divided, about half the Ravens went with each party. On first starting in the morning, they always accompanied the party to a short distance, and then they returned to the old camping-ground, apparently to make sure that nothing eatable had been left behind, and there they might be seen prowling about wisely for an hour or so, again joining the party in the afternoon at the new camp."

Dr. Stoliczka noted the Raven as beginning to build its nest near Aktásh on the 4th of May.

Dr. Scully says that on the return journey, in August, the Raven was met with below Kizil Yailak, and was very numerous about the Sanju Pass.

Genus **COLÆUS.**

31. **COLÆUS COLLARIS.**

- Corvus collaris*, Drummond, Ann. & Mag. Nat. Hist. xviii. p. 11 (1846).  
*Colæus monedula* (nec L.); Horsf. & Moore, Cat. B. Mus. E.I. Co. ii. p. 562 (1856, pt.); Hume & Henders. Lahore to Yark. p. 239 (1873); Scully, Str. F. iv. p. 158 (1876).  
*Corvus monedula* (nec L.); Severtz. Turkest. Jevotn. p. 63 (1873); Dresser, Ibis, 1875, p. 237; Blanf. East. Persia, ii. p. 263 (1876); Bidd. Ibis, 1881, p. 77; C. Swinh. Ibis, 1882, p. 111; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 88; Scully, J. A. S. Beng. lvi. p. 85 (1887); Oates, Faun. Brit. Ind., Birds, i. p. 22 (1889).  
*Colæus collaris*, Sharpe, Cat. B. Brit. Mus. iii. p. 27 (1877); id. Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 68 (1889).

No. 158. Baramula, July 25, 1873.

No. 188. Srinagar, July 28, 1873.

[These two specimens are in full moult.]

Nos. 980-983. Posgam, November 7, 1873.—Length 13 inches, wing 9.1, tail 4.9, tarsus 1.7; expanse 26.0. Iris blue; bill and feet black. "Zachea" (*Kokand*).

No. 943. Yarkand, November 8, 1873.

[The collar is nearly obsolete in this specimen.]

Nos. 987, 988. Yarkand, November 9, 1873.

[These two specimens, as well as No. 983, have a slight indication of a fringe to the feathers of the hind neck, showing a faint approach to *C. dauricus*.]

Nos. 1353, 1354. Kashghar, February 14, 1874.

Mr. Oates does not admit that *Colæus collaris* is distinct from the ordinary Jackdaw of Europe (*C. monedula*). I fancy that the birds which do not show a hoary collar are immature, when, of course, they would be exactly like young *C. monedula*. At present I look upon the Eastern Jackdaws as forming a well-marked race.

According to Dr. Scully they are only winter visitors to Kashghar, but they breed in the mountains of Aksu. Colonel Biddulph obtained a specimen at Maralbashi in January 1874, which Mr. Hume states to be absolutely identical with Kashmir individuals.

Colonel Biddulph's note is:—"Very common in Kashmir. This species, too, we first met in Yarkand at Sanju. It was very common during the winter everywhere in the plains as far as Maralbashi. It did not, however, ascend the hills in the Pamir."

Dr. Henderson states that the Jackdaw was very common almost everywhere in Kashmir, where it lives in the villages and makes its nest under the eaves of the houses and in old buildings.

Genus **CORONE.**

32. **CORONE SHARPII.**

- Corvus cornix* (nec Linn.); Horsf. & Moore, Cat. B. Mus. E.I. Co. ii. p. 553 (1856); Severtz. Turkest. Jevotn. p. 63 (1873); Dresser, Ibis, 1875, p. 237; Scully, Str. F. iv. p. 156 (1876); Blanf. East. Persia, ii. p. 262 (1876); Bidd. Ibis, 1881, p. 77; Scully, ibid. p. 570; C. Swinh. Ibis, 1882, p. 111; Severtz. Ibis, 1883, p. 55; Zarudn. Bull. Soc. Nat. Moscou, 1885, p. 59; Radde, Ornith. iii. p. 473 (1887).

*Corone cornix*, Sharpe, Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 68 (1889).

*Corvus sharpii*, Oates, Faun. Brit. Ind., Birds, i. p. 20 (1889).

No. 950. Sanju, November 1, 1873. [A pure-bred Hooded Crow.]

No. 1070. Yarkand, November 21, 1873. [Hybrid between *C. sharpii* and *C. corone*, the latter element predominating.]

No. 1077. Yarkand, November 28, 1873. [A specimen in which *C. corone* largely predominates.]

No. 1279. Kashghar, January 26, 1874. [Pure-bred Hooded Crow.]

The Yarkand birds are like the Siberian ones, much paler and more dove-coloured than *C. cornix* of Europe, but yet not light enough for *C. capellanus*.

Dr. Scully says that the Hooded Crow was very common in the plains of Eastern Turkestan during the winter, when it was seen daily at Kashghar and Yarkand, associating with the Rook and the Black Crows.

Colonel Biddulph's note is as follows:—"Is a winter bird. We first found it at Sanju in November, and towards Yarkand it became commoner, being mixed up with the Black Crow, and all through the winter about Kashghar it was common to a degree in the streets and everywhere. When we went towards the Pamir it disappeared directly we got into the hills, and had left the plains of Yarkand altogether when we returned in May. The people said they went eastward." Dr. Scully also states that he saw the species first near Yangi Hissar in October, and it migrated from Yarkand about the end of March, to repair, it was said, to the hills near Aksu, where it is reported to breed. The Turki name for this species is "Ala Kargha," the "Variegated Crow."

This same pale form of Hooded Crow extends to Siberia, where Mr. Seebohm found it breeding with *C. corone* at Krasnoyarsk. It also appears to be the ordinary Crow of Persia, and reaches to Gilgit and the extreme north-west of India in winter.

### 33. CORONE CORONE.

*Corvus corone*, Linn. S. N. i. p. 155 (1766); Severtz. Turkest. Jevotn. p. 63 (1873); Dresser, Ibis, 1875, p. 237; Scully, Str. F. iv. p. 156 (1876); Bidd. Ibis, 1881, p. 76; Scully, ibid. p. 570; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 88; Radde, Orn. iii. p. 473 (1887); Oates, Faun. Brit. Ind., Birds, i. p. 16 (1889).

*Corone corone* (L.); Sharpe, Cat. B. Brit. Mus. iii. p. 36 (1877).

*Corvus culminatus*, Scully, Str. F. iv. p. 157 (1876).

No. 656. Leh, September 9, 1873.

No. 1067. Yarkand, November 28, 1873.

No. 1278. Kashghar, January 26, 1874.

I cannot see any difference between the two specimens of Crows collected by Dr. Scully and now in the Hume Collection. They are both, to my mind, *C. corone*, and I doubt if *C. culminatus* crosses into Yarkand.

Dr. Scully found the Carrion-Crow very common throughout the plains of Eastern Turkestan, where it lives permanently and breeds. He gives a description of the eggs.

### 34. CORONE MACRORHYNCHA.

*Corvus macrorhynchus*, Wagl. Syst. Av. *Corvus*, sp. 3 (1827); Oates, Faun. Brit. Ind., Birds, i. p. 17 (1889).

*Corvus levaillanti*, Less. Traité, p. 328 (1831); Bidd. Ibis, 1881, p. 77; Scully, ibid. p. 570.

*Corvus intermedius*, Adams, P. Z. S. 1859, p. 171; Hume & Henders. Lahore to Yark. p. 237 (1873).

*Corone macrorhyncha*, Sharpe, Cat. B. Brit. Mus. iii. p. 38 (1877).

*Corone levaillanti*, Sharpe, t. c. p. 39 (1877).

*Corvus culminatus* (nec Sykes), Wardlaw Ramsay, Ibis, 1880, p. 62.



No. 134. Urumbu, July 24, 1873.

This species is found throughout the Himalayas and extends to Gilgit.

Genus **PICA**.

35. **PICA PICA**.

*Corvus pica*, Linn. S. N. i. p. 157 (1766).

*Pica caudata*, Severtz. Turkest. Jevotn. p. 64 (1873); Zarudn. Ois. Transcasp. p. 58 (1885).

*Pica bactriana*, Bp.; Hume & Henders. Lahore to Yark. p. 240; Scully, Str. F. iv. p. 158 (1876).

*Pica rustica* (Scop.), Dresser, Ibis, 1875, p. 238; Blanf. East. Persia, ii. p. 264 (1876); Wardlaw Ramsay, Ibis, 1880, p. 63; Bidd. Ibis, 1881, p. 78; Scully, ibid. p. 572; C. Swinh. Ibis, 1882, p. 111; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 88; Scully, J. A. S. Beng. lvi. p. 85 (1887); Oates, Faun. Brit. Ind., Birds, i. p. 24 (1889).

*Pica media*, Blyth; Prjev. in Rowley's Orn. Misc. ii. p. 278 (1877).

*Pica pica* (L.); Sharpe, Cat. B. Brit. Mus. iii. p. 62 (1877); id. Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 69 (1889).

No. 449. Chiliscambo, August 18, 1873.

No. 483. Shargol, August 20, 1873.

No. 543. Leh, August 27, 1873.

[All the above specimens are in full moult.]

(No number.) Sanju, October 28, 1873. "Hakke" (*Kokand*); "Saghizghán" (*Turki*).

No. 926. Sanju, November 1, 1873.

No. 1181. Chakmak, Thian-Shan, January 3, 1874.

No. 1523. Panjah, April 14-23, 1873.

Although I am perfectly willing to admit that the amount of white on the quills in the Magpies varies considerably, yet none of the above specimens approach the white-winged form called *P. leucoptera*, which was only obtained in the vicinity of Yarkand. Dr. Scully apparently only met with the ordinary form of Magpie, but the winter specimens observed by him at Yarkand were probably *P. leucoptera*. He gives the following note:—"This Magpie was first observed, within the limits of Kashgharia, at Kiwaz (elevation 7500) on the 26th of September, 1874. After that it was not seen until we reached Kashghar in October, and there it was common in gardens and on roadside trees during the months of November and December. The bird appears to be almost unknown at Yarkand, where only a few stragglers are occasionally seen in winter. On the return journey in August it was seen on two occasions in pairs near Kizil Aghil and the Chuchu Pass. In summer this species appears to inhabit all the hills round Eastern Turkestan, viz. north of Aksu and Kashghar, Sarikol, and south of Yarkand and of Sanju, descending to the borders of the plains in winter." The Magpie breeds at Gilgit.

Dr. Henderson states that this species was "first met with at Dras, soon after crossing the Zoji-là into Ladák. All through this latter province it was common about every village until the Pangong Lake was reached. In Ladák it appears to bear the title of 'Hashambri.' "

Colonel Biddulph writes:—"We first found this at Kargil, and it became very common in the Indus Valley; but we lost it directly we crossed into the Pangong valley. We again met with a Magpie at Tām, a march above Sanju, and thence we found it very common about villages and cultivation the whole way to Kashghar and to Maralbashi; but on our way to the Pamir we lost it beyond Aktala, the first camping-ground in the hills (5500 feet)."

36. *PICA LEUCOPTERA*.

*Pica leucoptera*, Gould ; Sharpe, Cat. B. Brit. Mus. iii. p. 66 (1877) ; Homeyer & Tancreé, MT. orn. Ver. Wien, 1883, p. 88 ; Severtz. Ibis, 1883, p. 52 ; Sharpe, Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 69 (1889).  
*Pica caudata*,  $\beta$ . *leucoptera*, Severtz. Turkest. Jevotn. p. 64 (1873).

No. 1111. Yangihissar, December 2, 1873.

No. 1173. Kashghar, December 21, 1873.

Genus **UROCISSA**.37. *UROCISSA FLAVIROSTRIS*.

*Urocissa flavirostris* (Blyth) ; Hume & Henders. Lahore to Yark. p. 242 (1873) ; Sharpe, Cat. B. Brit. Mus. iii. p. 72 (1877) ; Oates, Faun. Brit. Ind., Birds, i. p. 27 (1889).

No. 18. Murree, June 23, 1873.

No. 58. Murree, June 28, 1873.

No. 276. Gond, Sind Valley, August 8, 1873.

Mr. Hume's opinion that Gould's *U. cucullata* cannot stand (Lahore to Yark. p. 242), is confirmed by Mr. Oates (*l. c.*). Dr. Henderson states that the species was very abundant throughout the Kashmir valley, at the foot of the hills ; it was met with at Banihál and again near Baramula and Uri.

Genus **DENDROCITTA**.38. *DENDROCITTA HIMALAYENSIS*.

*Dendrocitta himalayensis*, Blyth ; Sharpe, Cat. B. Brit. Mus. iii. p. 79 (1877) ; Oates, Faun. Brit. Ind., Birds, i. p. 32 (1889).

No. 125. Rhara, Jhelum Valley, July 17, 1873.

A nestling, not fully grown.

Genus **GARRULUS**.39. *GARRULUS BISPECULARIS*.

*Garrulus bispecularis*, Vig. P. Z. S. 1830, p. 7 ; Hume & Henders. Lahore to Yark. p. 242 (1873) ; Sharpe, Cat. B. Brit. Mus. iii. p. 100 (1887) ; Oates, Faun. Brit. Ind., Birds, i. p. 39 (1889).

No. 13. Murree, June 23, 1873.

A couple of specimens were obtained by Dr. Henderson on the road to Kashmir on each side of the snowy pass ; it was not noticed elsewhere.

40. *GARRULUS LANCEOLATUS*.

*Garrulus lanceolatus*, Vigors, P. Z. S. 1830, p. 7 ; Sharpe, Cat. B. Brit. Mus. iii. p. 101 (1877) ; Oates, Faun. Brit. Ind., Birds, i. p. 38 (1889).

No. 8. Murree, June 21, 1873.

No. 41. Murree, June 25, 1873.

Genus **NUCIFRAGA**.41. *NUCIFRAGA MULTIPUNCTATA*.

*Nucifraga multipunctata*, Gould, P. Z. S. 1849, p. 23 ; Hume & Henders. Lahore to Yark. p. 239 (1873) ; Sharpe, Cat. B. Brit. Mus. iii. p. 55 (1877) ; Bidd. Ibis, 1881, p. 78 ; Scully, *ibid.* p. 572 ; Oates, Faun. Brit. Ind., Birds, i. p. 41 (1889).

Nos. 287, 291-293. Gaganghir, August 9, 1873.

Dr. Henderson states that this species was common in the valley of Kashmir in October; it was met with at Sonámarg, below Báltal, and as low as Gond.

Genus **GRACULUS**.

42. **GRACULUS GRACULUS**.

*Corvus graculus*, Linn. Syst. Nat. i. p. 158 (1766).

*Fregilus graculus* (L.); Hume & Henders. Lahore to Yark. p. 243 (1873); Severtz. Turkest. Jevotn. p. 63 (1873); Scully, Str. F. iv. p. 159 (1876); Prjev. in Rowley's Orn. Misc. ii. p. 285 (1877); Scully, Ibis, 1881, p. 572; Swinhoe, Ibis, 1882, p. 111; Homeyer & Tancré, MT. orn. Ver. Wien, 1883, p. 88; Zarudn. Ois. Transcasp. p. 59 (1885); Radde, Orn. iii. p. 474 (1887).

*Fregilus himalayanus*, Gould, P. Z. S. 1862, p. 125.

*Pyrrhocorax graculus*, Dresser, Ibis, 1875, p. 237; Blanf. E. Persia, ii. p. 264 (1876); Biddulph, Ibis, 1881, p. 78; Severtz. Ibis, 1883, p. 55.

*Graculus graculus* (L.); Sharpe, Cat. B. Brit. Mus. iii. p. 146 (1877).

*Graculus eremita* (L.); Oates, Faun. Brit. Ind., Birds, i. p. 43 (1889).

No. 390. Mataian, Dras Valley, August 14, 1873 (*Capt. Trotter*).

No. 596. Leh, August 30, 1873.

Nos. 612, 614. Leh, September 4, 1873.

No. 715. Tanksi, September 16, 1873.

No. 1182. Chakmak, January 3, 1874.

No. 1418. Sasstekke, March 23, 1874.

The Leh specimens are very large and the wing reaches to 12·6 inches, and the smallest are the two from Sasstekke and Chakmak, which have the culmen 1·85 inch in length, whereas in the rest of the series it varies from 2·05 to 2·25 inches. The wing in the above smaller specimens is 10·7 to 11·3 inches; but it is absurd to found a specific distinction on the dimensions of the Chough, which varies greatly in size—the specimen from Mataian, for instance, having a wing only 10·7 inches in length (*cf.* also Sharpe, Cat. B. iii. p. 147).

Dr. Henderson, on his journey, found the Chough “very common all the way from the Sind Valley, through Ladák, to near the Pángong Lake. Red-billed Choughs, doubtless of this same species, were common on the Karakásh. On the upward journey, through Ladák, they were usually seen feeding morning and evening, in larger or smaller flocks, in cultivated ground; in October, on the return journey, they were feeding in enormous flocks on the berry of the *Hippophae rhamnoides*. This bird was known in Ladák as the *Chunka*.”

Dr. Scully writes:—“The Red-billed Chough was first met with within the limits of Eastern Turkestan on the Sanju Pass in September 1874. When we got into the hills they were seen every day and were very numerous about Kichik Yailak at an elevation of 12,000 feet. The Turki name is ‘Kizil tumchuk Kargha,’ the Red-billed Crow.”

The Chough was found by Colonel Biddulph “common everywhere above 10,000 or 11,000 feet.” He adds:—“I think I saw both this and the Alpine Chough up to the greatest heights we ascended, say nearly 20,000 feet. I remark that the bills of the Pamir birds are more slender than in those from the Indus valley.”

A note in Dr. Stoliczka's ‘Diary’ says that this species had already got young ones near Sasstekke on the 16th of May, but eggs were still to be had at that date.

Genus **PYRRHOCORAX.**43. **PYRRHOCORAX PYRRHOCORAX.**

*Corvus pyrrhonorax*, Linn. Syst. Nat. i. p. 158 (1766).

*Pyrrhonorax alpinus*, V.; Hume & Henders. Lahore to Yark. p. 249 (1873); Severtz. Turkest. Jevotn. p. 64 (1873); Dresser, Ibis, 1875, p. 237; Blauf. Geol. & Zool. E. Persia, ii. p. 263 (1876); Prjev. in Rowley's Orn. Misc. ii. p. 285 (1877); Sharpe, Cat. B. Brit. Mus. iii. p. 148 (1877); Biddulph, Ibis, 1881, p. 78; Scully, t. c. p. 573; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 88; Zarudn. Bull. Soc. Nat. Moscou, 1885, p. 59; Radde, Ornith., iii. p. 474 (1887); Oates, Faun. Brit. Ind., Birds, i. p. 44 (1889).

No. 525, ♀. N.E. of Lamaguru on the road to the Indus.—Length 15 inches, wing 10·25, tail 6·5, tarsus 1·5. Iris dark brown; bill pale fleshy horny, darkest towards tip; feet and toes blackish brown. A solitary specimen.

This is the individual which Stoliczka thought might belong to an undescribed species. As Mr. Hume has rightly conjectured, it is only the young of *P. alpinus* (vel *pyrrhonorax*).

No. 531. Saspul on the Indus, August 25, 1873.—Length 17 inches, wing 10·6, tail 7·5, tarsus 1·7. Iris brown; bill yellow; feet coral-red.

No. 852. North of Sháhidúla, Karakash, October 22, 1873. "Kara-shachshág."

No. 1419. Sasstekke, February 23, 1874.

Colonel Biddulph's note runs:—"Found both in Himalayas, Karakorum (I did not go to the Thian Shan), and the Pamir, as well as the mountains leading to it. As a rule they were always found higher up than the Red-billed Choughs; except at the Pamir, they were less common than these latter, but at Aktash (12,600 feet) they were very numerous (May, 1874)."

Dr. Stoliczka found it breeding near Sasstekke on the 16th of May.

Genus **PODOCES.**44. **PODOCES BIDDULPHI.** (Plate IV.)

*Podoces biddulphi*, Hume, Str. F. ii. pp. 503, 529 (1874); Sharpe, Cat. B. Brit. Mus. iii. p. 151 (1877).

No. 1258, ♂. Maralbashi, January 1874.

The typical specimen of *P. biddulphi* was a female, procured at Maralbashi by Colonel Biddulph on the 10th of January, and it is now in the British Museum.

No. 1730. Yarkand, May 15-20, 1874. "Bought alive in bazaar."

This is a young bird, and it has a much shorter bill than the adults, and both the bill and the legs are horny brown, instead of being black. The wings and the tail are like those of the adult, but there is a broader black mark along the centre of the middle tail-feather. The black facial markings are only just commencing to show, and the black head is obscured by broad sandy buff tips to the feathers.

Colonel Biddulph writes:—"I first saw these beyond Yengi-awat, on the road to Maralbashi. They were generally in pairs or singly on the road, pecking at horse-dung. The country was rather broken and covered with bushes. When alarmed, they fly up and perch on the topmost twigs of the bush. I heard no cry, but they are very wild and wary: if followed they go on from bush to bush, with short flights, always keeping out of shot. In the jungle north of Maralbashi I saw them in largish flocks of from ten to twelve, and when in flocks they did not appear quite so wary. The flight is heavy, flapping, undulating, something like that of a Woodpecker; it is not in the slightest degree like that of the Choughs."

45. *PODOCES HENDERSONI*.

*Podoces hendersoni*, Hume, Ibis, 1871, p. 408; id. & Henders. Lahore to Yark. p. 244, pl. xxii. (1873); Scully, Str. F. iv. p. 159 (1876); Sharpe, Cat. B. Brit. Mus. iii. p. 151 (1877); Prjev. in Rowley's Orn. Misc. ii. p. 275 (1877).

Nos. 929, 931. Khushtágh, November 2, 1873.

No. 946. Bora.—Length 11·7 inches, wing 5·6, tail 4·3. Iris brown; bill and feet black. Wings reach within 2·2 inches of end of tail.

Nos. 1365, 1366, 1367. Tughamati, February 19, 1874.

The typical specimens killed in August by Dr. Henderson have distinct spots of sandy buff on the head; these spots are also seen in Dr. Scully's specimen killed on the 29th of September in the desert near Sanju. In the two birds from Khushtágh the spots are less, and in all the specimens shot in February there is no trace of any of the pale spots, showing apparently that they are indicative of winter plumage.

This species was discovered by Dr. Henderson in the desert ground after leaving Sanju, *en route* to Khushtágh, and also near to Oi-Tográk.

Dr. Scully writes:—"This species was only met with in the desert country which intervenes between Sanju and Karghalik—an arm of the great Takla Makan Desert—which we crossed on entering and leaving the plains of Eastern Turkestan. It was never seen or heard of near Kashghar, Yarkand, or the country which lies between those two cities." He gives a very interesting account of the habits of the species, and says that "the Turki name is *Kil yurgha*, which has reference to the bird running in the trail of horses; it is also, though rarely, called *Kum saghizghani*, or 'Sand Magpie.' It is a permanent resident in Eastern Turkestan, and is said to breed in May and June."

General Prjevalski also found the species "from Ordos and Ala-shan down to the Kan-su mountains; avoiding these, it settles at Tsaidam, but has not been observed on the high plains of Northern Tibet." In Gobi, between Ala-shan and Urgey, he repeatedly saw the species, and he therefore considered that its distribution extended to 45° N. lat.

"*Podoces hendersoni*," writes Colonel Biddulph, "we got in the desert between Sanju and Yarkand, and again between the latter and Kashghar. Like *P. biddulphi*, they were on the road, feeding, but always in bare ground, and not amongst bushes, but they were not so shy. These were always found in pairs or singly, as we never saw them perch on any bushes; indeed they were never seen where there were any bushes. Both species, but especially this one, run famously. When they first see you they do not take to flight, but start off running, and the present species never seems to fly unless hard-pressed."

46. *PODOCES HUMILIS*.

*Podoces humilis*, Hume & Henders. Lahore to Yark. p. 247, pl. xxiii. (1873); Scully, Str. F. iv. p. 161 (1876).

Dr. Henderson was the discoverer of this species also. He observes:—"This strange bird was only seen above Kichik Yailák on the way to Yarkand; on the return journey it was not met with. It frequents short grassy downs, at a height of about 1100 feet. They were not in flocks, but were scattered all over the hill-side."

Dr. Scully writes:—"This species was first observed and a specimen shot at Kiwaz (elevation 7487 feet) on the 26th of September, 1874. The birds were running about in the



fields, and perching on twigs and bushes. At Kichik Yailak, in August 1875, they were numerous, and frequented the grassy hill-sides which abound there; they would seldom fly, but ran up hill very nimbly, making it rather difficult to bag them, considering that the elevation was about 13,000 feet in the valleys. The Kirghiz say that this species, which they call *Zungak*, is a permanent resident near their encampment, and feeds on worms and insects, never on grain or seeds. They add also that the bird makes its nest in holes about the hill-sides, breeding in June or July, and that the young birds are able to fly about the end of September."

#### Family ORIOLIDÆ.

##### Genus **ORIOLUS.**

#### 47. ORIOLUS KUNDOO.

*Oriolus kundoo*, Sykes, P. Z. S. 1832, p. 87; Hume & Henders. Lahore to Yark. p. 200, pl. xi. (1873); Dresser, Ibis, 1876, p. 187; Scully, Str. F. iv. p. 140 (1876); Bidd. Ibis, 1881, p. 54; Scully, ibid. p. 440; C. Swinh. Ibis, 1882, p. 106; Severtz. Ibis, 1883, p. 55; Oates, Faun. Brit. Ind., Birds, i. p. 504 (1889).

No. 132. Tinali, July 19, 1873.

No. 199. Srinagar, July 29, 1873.

Nos. 262-266. Srinagar, August 5, 1873. Native name "Poshmol."

No. 764. Sopur, July 26, 1873.

Nos. 1696, 1698. Kizil, May 19, 1874.

Nos. 1749-51, 1760. Yarkand, May 20, 1874.

Dr. Henderson found the species very common in Kashmir, both going and returning. It was met with again at Bora and Oi-Tográk, in the plains of Yarkand. "The Yarkandis called it the 'Zar Guldar,' a name apparently borrowed from the Persians."

Dr. Scully gives an interesting account of the nesting of the species in Yarkand. He states that it is a seasonal visitant to the plains of Eastern Turkestan, arriving about the end of April and migrating in September; it is never seen in winter. The Yarkandi name for the Oriole is *Sopia*, evidently given in imitation of its call. In Khokand the bird is called *Zar-ghaldak*."

Dr. Stoliczka says that he saw the first pair in 1874, on the 18th of May, at Ighiz Yar.

#### Family DICRURIDÆ.

##### Genus **BUCHANGA.**

#### 48. BUCHANGA LONGICAUDATA.

*Dicrurus longicaudatus*, "A. Hay;" Jerd. Madr. Journ. xiii. pt. 2, p. 121 (1844); Oates, Faun. Brit. Ind., Birds, i. p. 314 (1889).

*Buchanga longicaudata* (Hay); Sharpe, Cat. B. Brit. Mus. iii. p. 249 (1877); Scully, Ibis, 1881, p. 436.

No. 59. Murree, June 29, 1873.

No. 79. Murree, July 2, 1873.

No. 165, juv. Sopur, July 26, 1873.

No. 261. Srinagar, August 5, 1873.

49. BUCHANGA ATRA.

*Muscicapa atra*, Hermann, Obs. Zool. p. 208 (1804).

*Buchanga atra* (Hermann); Sharpe, Cat. B. Brit. Mus. iii. p. 246 (1877).

*Dicrurus ater*, Oates, Faun. Brit. Ind., Birds, i. p. 312 (1889).

No. 123. Chuttrebelas, Jhelum Valley, July 16, 1873.

No. 124. Rhara on the Jhelum, July 17, 1873.

No. 133. Tinali, July 19, 1873.

Colonel Biddulph procured this species at Baramula.

Family STURNIDÆ.

Genus **STURNUS**.

50. STURNUS MENZBIERI.

*Sturnus vulgaris* (nec L.) ; Severtz. Turkest. Jevotn. p. 64 (1873); Dresser, Ibis, 1875, p. 238; Blanf. East. Persia, ii. p. 266 (1876, pt.); Prjev. in Rowley's Orn. Misc. ii. p. 287 (1877); Finsch, Verh. z.-b. Ges. Wien, xxix. p. 201 (1879); Bidd. Ibis, 1881, p. 78; Scully, ibid. p. 573; C. Swinh. Ibis, 1882, p. 111; Homeyer & Taneré, MT. orn. Ver. Wien, 1883, p. 89; Scully, J. A. S. Beng. lvi. p. 85 (1887).

*Sturnus menzbieri*, Sharpe, Ibis, 1888, p. 438; id. Cat. B. Brit. Mus. xiii. p. 33, pl. i. (1890); Oates, Faun. Brit. Ind., Birds, i. p. 522 (1889).

No. 953. Bora, November 4, 1873.

This specimen is in full winter plumage, and appears to be the only individual of the species met with by the Expedition. The Starling referred to by Stoliczka (Str. F. ii. p. 464) as *S. vulgaris* may have been this species, but about the same date he was also shooting specimens of *S. porphyronotus*.

51. STURNUS INDICUS.

*Sturnus indicus*, Hodgs. in Gray's Zool. Misc. p. 84 (1844); Sharpe, Cat. B. Brit. Mus. xiii. p. 35 (1890).

*Sturnus nitens*, Hume & Henders. Lahore to Yarkand, p. 250, pl. xxiv. (1873).

*Sturnus humii*, Brooks; Oates, Faun. Brit. Ind., Birds, i. p. 520 (1889).

No. 185. Srinagar, July 27, 1873.

Nos. 224, 230. Srinagar, July 31, 1873.

No. 250. Srinagar, August 3, 1873.—Length 8·3 inches, wing 4·5, tail 2·2, tarsus 1·0; expanse 13·6; bill from front 1·04, from gape 1·25. Iris yellow; bill blackish, pale towards the tips; feet reddish brown.

All the specimens are in worn and much abraded plumage. According to the strict letter of the law, Mr. Oates is no doubt right in calling this species *Sturnus humii*, as Hodgson never published a description of his *Sturnus indicus*. The names of the latter ornithologist, resting on his paper in Gray's 'Ornithological Miscellany,' and founded on his collection of paintings in the British Museum, have in so many cases been recognized and come into common use, that I think it is better to strain the law of nomenclature a little for their adoption.

## 52. STURNUS PORPHYRONOTUS.

*Sturnus unicolor* (nec T.) ; Severtz. Turkest. Jevotn. p. 64 (1873) ; Dresser, Ibis, 1875, p. 238.

*Sturnus vulgaris* (nec L.) ; Hume & Henders. Lahore to Yark. p. 250 (1873) ; Scully, Str. F. iv. p. 162 (1876).

*Sturnus purpurascens* (nec Gould) ; Biddulph, Ibis, 1881, p. 79 ; Scully, ibid. p. 573 ; Severtz. Ibis, 1883, p. 55.

*Sturnus porphyronotus*, Sharpe, Ibis, 1888, p. 438 ; Oates, Faun. Brit. Ind., Birds, i. p. 521 (1889) ; Sharpe, Cat. B. Brit. Mus. xiii. p. 38, pl. 2 (1890).

No. 921. Sanju, November 1, 1873.—Length 9 inches, wing 5, tail 2·6, tarsus 1·2 ; expanse 14·7 ; bill from front 0·97, from gape 1·36. Iris very narrow, light brown ; bill black ; feet reddish brown.

No. 246. Sanju, November 1, 1873.

No. 989. Yarkand, November 9, 1873.

Nos. 1009, 1010. Yarkand, November 12, 1873.

No. 1291. Kashghar, February 2, 1874.

No. 1774. Kashghar, May 23, 1874.

Dr. Scully says that this Starling is a very common bird in the plains of Kashgharia. From about the end of February to the beginning of August the bird literally swarms in the neighbourhood of Yarkand, but it was never observed south of Karghalik ; in the depth of winter it appears to migrate south-eastwards, but a few Starlings were seen even in January, between Kashghar and Yarkand. Turki name *Kara Kuchkach*, i. e. “Blackbird.” Dr. Scully gives an account of the nidification of the species.

Writing from Yarkand, Dr. Stoliczka says that this species must begin breeding in the second half of April. It builds in holes of houses, walls, and chattis, &c. The eggs are pale blue.

Colonel Biddulph obtained this Starling in Kashghar in March and at Sanju on the 31st of October. He writes :—“Very common in the plains of Yarkand. I don’t remember seeing it about Kashghar in the depth of winter, nor did we meet with it anywhere in the hills.”

Genus **PASTOR.**

## 53. PASTOR ROSEUS.

*Turdus roseus*, Linn. Syst. Nat. i. p. 294 (1766).

*Pastor roseus* (L.) ; Horsf. & Moore, Cat. B. Mus. E.I. Co. ii. p. 539 (1856) ; Dresser, Ibis, 1875, p. 238 ; Scully, Str. F. iv. p. 164 (1876) ; Blanf. East. Persia, ii. p. 267 (1876) ; Biddulph, Ibis, 1881, p. 79 ; Swinhoe, Ibis, 1882, p. 111 ; Severtz. Ibis, 1883, p. 55 ; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 89 ; Zarudn. Ois. Transcasp. p. 58 (1885) ; Radde, Ornith. iii. p. 479 (1887) ; Scully, J. A. S. Beng. lvi. p. 86 (1887) ; Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 82 (1889) ; id. Cat. B. Brit. Mus. xiii. p. 65 (1890) ; Oates, Faun. Brit. Ind., Birds, i. p. 518 (1889).

*Sturnus roseus* (L.) ; Severtz. Turkest. Jevotn. p. 64 (1873).

No. 681, ♀ juv. Indus valley, south of Chimray, September 13, 1873.—Total length 9 inches, wing 5·1, tail 2·72, tarsus 1·2. Iris dark brown ; bill dusky brown, yellow at base ; feet fleshy brown.

Dr. Scully writes :—“A single specimen of the Rose-coloured Starling was obtained in Eastern Turkestan in September. It is said to be common in Khokand and Badakshan, where it feeds on mulberries ; and the Yarkandi bird-catchers say that it only occurs as a mere straggler in Kashgharia, a few birds being occasionally seen in the summer after the prevalence of strong north-westerly or westerly winds. Its Turki name is *Sách*.”

Genus **TEMENUCHUS**.

54. **TEMENUCHUS PAGODARUM**.

*Turdus pagodarum*, Gm. Syst. Nat. i. p. 816 (1788).

*Temenuchus pagodarum* (Gm.); Horsf. & Moore, Cat. B. Mus. E.I. Co. ii. p. 528 (1856); Biddulph, Ibis, 1881, p. 79; Oates, Faun. Brit. Ind., Birds, i. p. 533 (1889); Sharpe, Cat. B. Brit. Mus. xiii. p. 73 (1890).

*Sturnia pagodarum* (Gm.); Wardlaw Ramsay, Ibis, 1880, p. 63; Scully, Ibis, 1881, p. 573.

No. 139. Hatti, July 21, 1873.

Genus **ACRIDOTHERES**.

55. **ACRIDOTHERES TRISTIS**.

*Acridotheres tristis* (L.); Hume & Henders. Lahore to Yark. p. 252 (1873); Wardlaw Ramsay, Ibis, 1880, p. 63; Oates, Faun. Brit. Ind., Birds, i. p. 537 (1889); Sharpe, Cat. B. Brit. Mus. xiii. p. 80 (1890).

According to Dr. Henderson this species was very plentiful in Kashmir, and was observed ten miles beyond Srinagar, after which it was not again met with till the expedition returned to the same localities.

Family **FRINGILLIDÆ**.

Subfamily **FRINGILLINÆ**.

Genus **PYCNORHAMPHUS**.

56. **PYCNORHAMPHUS ICTEROIDES**.

*Coccothraustes icteroides*, Vigors, P. Z. S. 1830, p. 8.

*Hesperiphona icteroides* (Vig.); Hume & Henderson, Lahore to Yarkand, p. 257 (1873); Wardlaw Ramsay, Ibis, 1880, p. 66.

*Pycnorhamphus icteroides* (Vig.); Hume, Nests & Eggs Ind. B. p. 469 (1873); Sharpe, Cat. B. Brit. Mus. xii. p. 44 (1888); Oates, Faun. Brit. Ind., Birds, ii. p. 198 (1890).

No. 11, ♂. Murree, June 22, 1873.

No. 31, ♀. Murree, June 25, 1873.

No. 87, ♀. Dungagally, July 3, 1873.

No. 107. Murree, July 9, 1873.

No. 344. Sonámarg, August 11, 1873.

Dr. Henderson also met with this Grosbeak at Sonámarg on the 19th of June.

Genus **FRINGILLA**.

57. **FRINGILLA MONTIFRINGILLA**.

*Fringilla montifringilla*, Linn. Syst. Nat. i. p. 318 (1766); Severtz. Turkest. Jevotn. pp. 64, 116 (1873); Dresser, Ibis, 1875, p. 241; Tacz. Bull. Soc. Zool. France, i. p. 179 (1876); Blanf. East. Persia, ii. p. 247 (1876); Finsch, Verh. z.-b. Ges. Wien, xxix. p. 205 (1879); Biddulph, Ibis, 1881, p. 87; Scully, t. c. p. 579; Homeyer & Tancré, MT. orn. Ver. Wien, 1883, p. 89; Radde, Ornith., iii. p. 480 (1887); Sharpe, Cat. B. Brit. Mus. xii. p. 178 (1888); Oates, Faun. Brit. Ind., Birds, ii. p. 233 (1890).

No. 870, ♂ ad. Camp, Tām, October 25, 1873.—Iris dark brown; bill yellow, blackish towards tip; feet pale horny brown. Length 6.75 inches, wing 3.75, tail 2.68, tarsus 0.75; expanse 11; bill from forehead 0.45, from gape 0.62.

No. 869, ♂ imm. Tām, October 25, 1873.—Iris brown; bill as above; feet pale horny. Length 6·35 inches, wing 3·3, tail 2·34, tarsus 0·75; expanse 10·2; bill from forehead 0·45, from gape 0·62.

No. 883, ♂ ad. Kiwaz, October 26, 1873.

No. 1196, ♂ ad. South of Chakmak, January 9, 1874.

No. 1295, ♂ ad. Kashghar, February 1, 1874.

No. 1296, ♀ ad. Kashghar, February 2, 1874.

No. 1482, ♂ ad. Panjah, April 18, 1874.—Iris blackish brown; bill greenish yellow above, blackish towards the tip, yellow round the base, particularly below; feet dusky brown, the claws darker, the soles yellow. Length 6·8 inches, wing 3·7, tail 2·7, tarsus 0·8; expanse 11·15; bill from forehead 0·48, from gape 0·58. Wings reach to within 1·2 inch of end of tail.

Nos. 1583–84, ♂ ♀. Langarkish, April 26, 1874.

The males shot in April are in full breeding-plumage, being black above and on the sides of the face. Dr. Stoliczka's notes show the change in the colour of bill in summer and winter.

#### Genus **CARDUELIS**.

##### 58. **CARDUELIS CANICEPS**.

*Carduelis caniceps*, Vigors, P. Z. S. 1837, p. 23; Finsch, Verh. z.-b. Ges. Wien, xxix. p. 205 (1879); Wardlaw Ramsay, Ibis, 1880, p. 67; Bidd. Ibis, 1881, p. 85; Scully, t. c. p. 578; C. Swinh. Ibis, 1882, p. 115; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 89; Sharpe, Cat. B. Brit. Mus. xii. p. 189 (1888); Oates, Faun. Brit. Ind., Birds, ii. p. 225 (1890).

*Carduelis orientalis*, Eversm.; Severtz. Turkest. Jevotn. pp. 64, 116 (1873); Dresser, Ibis, 1875, pp. 243, 387; Tacz. Bull. Soc. Zool. France, i. p. 180 (1876); Zarudn. Ois. Transcasp. p. 54 (1885).

Nos. 229, 231, 234. Srinagar, July 31, 1873.

An adult and two young birds.

No. 283. Gond, August 8, 1873.—Length 3·36 inches, wing 3·3, tail 2·0, tarsus 0·8; bill from front 0·5, from gape 0·55. Iris dark brown; bill pale fleshy, dusky towards the tips; feet light horny brown.

Nos. 373, 378. Baltal, August 12, 1873.

No. 400. Mataian, August 14, 1873.

Colonel Biddulph only met with this Goldfinch in Kashmir, and procured specimens at Srinagar and in the Sind valley in July.

#### Genus **CHRY SOMITRIS**.

##### 59. **CHRY SOMITRIS SPINOIDES**.

*Carduelis spinoides*, Vigors, P. Z. S. 1831, p. 44.

*Hypacanthis spinoides*, Cab. Mus. Hein. Th. i. p. 161 (1850); Oates, Faun. Brit. Ind., Birds, ii. p. 231 (1890).

*Chrysomitris spinoides*, Sharpe, Cat. B. Brit. Mus. xii. p. 201 (1888).

No. 282. Gond, August 8, 1873.—Length 3·25 inches, wing 3·1, tail 1·8, tarsus 0·62; bill from front 0·42, from gape 0·5. Iris brown; bill fleshy brown above; feet horny brown.



Genus **CALLACANTHIS.**

60. **CALLACANTHIS BURTONI.**

*Callacanthis burtoni* (Gould); Sharpe, Cat. B. Brit. Mus. xii. p. 232 (1888); Oates, Faun. Brit. Ind. Birds, ii. p. 226 (1890).

Colonel Biddulph procured a male at Sonámarg on the 16th of July. He says it was seen here and at Gulmurg on the return journey only.

Genus **ACANTHIS.**

61. **ACANTHIS BREVIROSTRIS.**

*Linota brevirostris*, Bp.; Hume & Henders. Lahore to Yark. p. 260, pl. 26 (1873); Scully, Str. F. iv. p. 170 (1876); Blanf. East. Persia, ii. p. 250 (1876); Prjev. in Rowley's Orn. Misc. ii. p. 306 (1877); Bidd. Ibis, 1881, p. 86, 1882, p. 284.

*Acanthis flavirostris* (nec L.); Severtz. Turkest. Jevotn. p. 64 (1873).

*Linaria flavirostris* (nec L.); Dresser, Ibis, 1875, p. 242.

*Linaria brevirostris*, Scully, Ibis, 1881, p. 578.

*Acanthis brevirostris* (Bp.); Sharpe, Cat. B. Brit. Mus. xii. p. 238 (1888); Oates, Faun. Brit. Ind., Birds, ii. p. 229 (1890).

Nos. 618, 619, 624. Leh, September 4, 1873.

Nos. 751, 752. Lukung, Pangong Lake, September 19, 1873.

No. 778. Chagra, September 21, 1873.

Nos. 792, 793. Pamsal, Changchenmo Valley, September 23, 1873.

Nos. 1194, 1195. Chakmak, January 9, 1874.

Nos. 1416, 1417. Sasstekke, March 23, 1874.

Nos. 1483, 1485, 1486, 1511, 1521. Panjah, April 14-23, 1874.

Nos. 1542, 1543, ♂ ♀. Panjah, April 24, 1874.—Length 5·5 inches, wing 3, tail 2·4, tarsus 0·68; expanse 9·15; bill from front 0·38, from gape 0·42; length of foot 1·2. Iris dark brown; bill greenish yellow, dusky towards the tip; feet brownish black. Middle toe 0·65 inch, hind toe 0·5; wings reach within 1·25 of end of tail.

Nos. 1545, 1547, 1548, 1550. Panjah, April 24, 1874.

No. 1558. Panjah, April 25, 1874.

No. 1846. Kugiár, June 2, 1874.

A full description of the changes of plumage in this Linnet are given by me in the British-Museum 'Catalogue' (*l. c.*).

Dr. Scully states that "this species was fairly numerous in the hills on the south side of Eastern Turkestan at elevations from 8000 to 13,000 feet. It was first observed near the Chuchu Pass, and was quite common near Gulgun Shah in the Karakash valley, where a young nestling was obtained, proving that the bird breeds in that locality—probably in July and August."

Dr. Stoliczka found the species common and evidently breeding at Panjah on the 15th of April, and after crossing the Chiklik Pass on the 4th of June, 1874, he says that he found it breeding in the valley near Duba.

Colonel Biddulph's note is as follows:—"We first met with this Linnet at Leh and near the Pangong lake. We procured them at intervals all across the Karakorum, both coming and going. We also got them in the plains of Turkestan during the winter, and in Wakhan in

the spring it was particularly common. They were generally in small parties, the individuals of which, however, were a good deal scattered. They usually perched about on bushes. I never remember hearing any song, nor did I see them in fields." Dr. Henderson obtained three specimens on the banks of the Arpalik River, in Hill Yarkand, a short distance from where the plains commence.

Genus **MONTIFRINGILLA.**

62. **MONTIFRINGILLA ADAMSI.**

*Montifringilla adamsi*, Moore, MS.; Adams, P. Z. S. 1858, p. 482, 1859, p. 178, pl. 156; Hume & Henderson, Lahore to Yarkand, p. 262 (1873); Stoliczka, Str. F. ii. p. 463 (1874); Scully, Str. F. iv. p. 172 (1876); Prjev. in Rowley's Orn. Misc. ii. p. 289 (1877); Severtz. Ibis, 1883, pp. 60, 81; Prjev. Ibis, 1884, p. 244; Sharpe, Cat. B. Brit. Mus. xii. p. 261 (1888); Oates, Faun. Brit. Ind., Birds, ii. p. 246 (1890).

No. 491. Kharbu, Ladak, August 21, 1873.—Iris light brown; bill horny blackish, yellowish at base of lower mandible; feet black. Length 7·2 inches, wing 4·45, tail 3·0, tarsus 0·8; bill from front 0·5, from gape 0·62.

Apparently an adult male after breeding, with the bill just beginning to turn yellow. The terminal third of the inner secondaries only is white, and in most of them the black or brown colour extends to the end of the outer web. The back is indistinctly streaked with dark brown.

No. 496. Kharbu, August 21, 1873.

A male in worn breeding-dress, very similar to the foregoing.

No. 499. Kharbu, August 21, 1873.

Quite a young bird in ashy-brown plumage; the head rather darker ashy; back and scapulars with broad longitudinal centres of dark brown; rump and upper tail-coverts blackish, the lateral coverts white; lesser and median coverts brown, the latter white at the ends; greater coverts white, with concealed blackish bases, externally washed with pale tawny buff and dark brown at the ends; bastard-wing and primary-coverts dark brown, the latter with a little concealed white patch on the inner web; quills dark brown, edged with ashy fulvous, the secondaries with pale tawny buff, the inner ones subterminally white on the inner web, this not extending to the end of the feather; tail-feathers brown, broadly margined with pale tawny buff, all but the centre feathers with more or less white on the inner web, the outer ones almost entirely white, with an external wash of tawny and a small tip of dark brown; lores, eyelid, and a streak along the sides of the hinder crown ashy whitish; sides of face whitish, with a yellowish tinge, the ear-coverts pale ashy brown; throat and breast light ashy, the centre of the breast and abdomen yellowish white; sides of body and flanks pale fulvescent brown; under tail-coverts white, fulvescent at the ends; under wing-coverts and axillaries white.

No. 505. Kharbu, August 22, 1873.

An adult bird, apparently a female, with the bill almost entirely yellow. The white tips to the median wing-coverts are abraded, so that these appear to be brown like the lesser coverts, and the primary-coverts are only white in the middle, there being a broad basal as well as a terminal mark of dark brown.

Nos. 520, 522. Lamaguru, August 23, 1873.

An old male in worn breeding-plumage and a young male in first plumage. In the latter the whole under surface of the body is washed with pale yellow.

No. 635. Leh, September 5, 1873.

A young bird in full moult into its first winter plumage, which evidently resembles the immature plumage, but is much more rufescent, all the edges of the wing-coverts and tail-feathers being tawny buff.

No. 651. North of Leh, 13,000 feet, September 8, 1873.

Colonel Biddulph's specimens were collected between the 16th of May and the 30th of June at Digar, Kaskasu, and Leh. He writes:—"We first saw it about the Fotá-la. On our return from Wakhan we noticed a few individuals on the passes between Sarikol and Turkestan. We also found it on both sides of the Diga-la in June, and it was very common all about Leh."

Dr. Henderson says that this species was met with in June about Kharbu in Ladák; all the specimens then obtained had black bills. Returning in October it was observed in large flocks at the same locality, and all the specimens then procured had yellow bills. They occurred at a height of about 13,000 feet at the Fotá Pass.

Dr. Scully says:—"This Finch was met with on the return journey on the Chuchu Pass, at an elevation of 11,700 feet. Further on, in the hills of Eastern Turkestan, it was seen in suitable localities, but at heights of about 14,000 feet and above it seems to be entirely replaced by *M. hæmatopygia*."

On the 21st of August, Dr. Stoliczka writes in his 'Diary':—"Going up the Namika-la the only bird was *Montifringilla adamsi*. Biddulph and I shot several; they were in flocks, feeding and running on the ground like Larks, rising somewhat similarly with a loud chirp."

#### 63. MONTIFRINGILLA ALPICOLA.

*Passer alpicola*, Pall. Zoogr. Rosso-Asiat. ii. p. 20 (1811).

*Montifringilla nivalis* (nec L.); Severtz. Turkest. Jevotn. p. 75 (1873).

*Montifringilla fringilloides*, Boie; Dresser, Ibis, 1875, p. 242.

*Montifringilla alpicola*, Blanf. East. Persia, ii. p. 248 (1876); Seeb. Ibis, 1883, p. 10; Severtz. t. c. p. 60; Radde, Ornith., iii. p. 480 (1887); Sharpe, Cat. B. Brit. Mus. xii. p. 260 (1888).

No. 1668. Kaskasu Pass, May 15, 1874.—Length 7 inches, wing 4·7, tail 3, tarsus 0·95; expanse 13·7; bill from front 0·52, from gape 0·63; length of foot 1·4. Iris light hazel-brown; bill black; feet blackish brown. Middle toe 0·8 inch, hind toe 0·6; wings reach within 0·5 inch of end of tail.

Nos. 1669–1672. Kaskasu Pass, May 15, 1874.

In Dr. Stoliczka's 'Diary' he writes that he had observed this same "white *Montifringilla* on the Turgat Pass, north of Chakmak." The occurrence here recorded extends the known range of the species considerably to the eastward.

#### 64. MONTIFRINGILLA SORDIDA.

*Fringillauda sordida*, Stoliczka, J. A. S. Beng. xxxvii. p. 63 (1868); Scully, Str. F. iv. p. 172 (1876); Biddulph, Ibis, 1881, p. 88; Scully, ibid. p. 579; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 89; Oates, Faun. Brit. Ind., Birds, ii. p. 248 (1890).

*Fringillauda nemoricola* (nec Hodgk.); Hume & Henderson, Lahore to Yarkand, p. 264 (1873).

*Passer pulverulentus*, Severtz. Turkest. Jevotn. pp. 64, 116 (1873).

*Montifringilla sordida*, Sharpe, Cat. B. Brit. Mus. xii. p. 266 (1888).

*Fringillauda altaica*, Eversm.; Severtz. Ibis, 1883, p. 60.

Nos. 392, 393, 399, 403. Mataian, August 14, 1873.

No. 409. Mataian, August 15, 1873.—Length 6·25 inches, wing 3·8, tail 2·55, tarsus 0·75; expanse 11·5; bill from front 0·43, from gape 0·53; length of foot 1·4. Iris light brown; bill horny; feet blackish horny.

No. 521. Lamaguru, August 23, 1873.

No. 720. Imm. Tanksi, September 17, 1873.

No. 1471, ♂. Panjah, April 16, 1874.—Length 6·5 inches, wing 4, tail 2·78, tarsus 0·72; expanse 12; bill from front 0·4, from gape 0·5; length of foot 1·37, spread of foot 1. Iris yellowish brown; bill dusky brown, pale at root and below; feet blackish brown.

Nos. 1491, 1493, 1495. Panjah, April 14–23, 1874.

No. 1544. Panjah, April 24, 1874.

No. 1581. Langarkish, April 26, 1874.

Dr. Stoliczka's series contains apparently specimens of both sexes, and the series confirms my account of the absence of difference between them. What the above-named author, in his 'Diary,' took for the old hens must have been immature birds. On the 16th of May he notes that the species was still migrating in large flocks near Sasstekke, but was beginning to pair. On the march up the Zoji-là, he found this species common "just on the pass. It flies about in flocks, very much like a Lark feeding on the ground. It has a chirping voice, not unlike that of *Passer*, and indeed replaces it, for we did not see one of the latter here."

Colonel Biddulph procured a female bird at Sakti on the 14th of September, 1873, at 12,800 feet. Mr. Hume has appended to the specimen the following note:—"This is much more rufescent than winter and spring birds. The whole of the head, nape, neck, chin, throat, face, and upper breast are streaked with dull ferruginous brown, darkest on the crown. The tips of the median and greater coverts, margins to the tertiaries and later secondaries, and centre tail-feathers bright rufous-buff; back more mingled with rufous; tips to upper tail-coverts rufescent and nearly obsolete." Colonel Biddulph also obtained specimens at Panjah in Wakhan in April 1874, and also in the Kalustan valley on the 6th of June. He sends us the following note:—"We found it on the Sakti Pass in September when going up, and all along the Karakash valley. It was also common in Wakhan in April and in the Kalustan valley in June. It seems generally common in the hills south of Turkestan, but I did not observe it in the plains country or higher up than 13,000 feet."

"This species," says Dr. Scully, "was observed near the course of the Sanju stream, between Tam and Kichak-Yailak, at elevations from 8900 to 12,000 feet." Dr. Henderson obtained a single specimen at Dras in Ladak, and thinks that some few birds probably breed there.

#### 65. MONTIFRINGILLA BRANDTI.

*Leucosticte brandti*, Bp. Consp. i. p. 537 (1850); Severtz. Turkest. Jevotn. p. 64 (1873); Dresser, Ibis, 1875, p. 242; Biddulph, Ibis, 1881, p. 88; Severtz. Ibis, 1883, p. 58.

*Montifringilla hæmatopygia*, Gould; Hume & Henderson, Lahore to Yarkand, p. 261 (1873); Scully, Str. F. iv. p. 171 (1876).

*Montifringilla brandti* (Bp.); Sharpe, Cat. B. Brit. Mus. xii. p. 269 (1888).

*Leucosticte hæmatopygia*, Severtz. Ibis, 1883, p. 58.

*Leucosticte pamirensis*, Severtz. Ibis, 1883, p. 58.

*Fringillauda brandti*, Oates, Faun. Brit. Ind., Birds, ii. p. 248 (1890).

No. 698, ♀. Camp Tsúltak, north of Chang-la, September 15, 1873.

No. 711, ♂ juv. Tanksi, September 16, 1873.

Nos. 802-806, ♀. Karatagh Lake, October 10, 1873.

No. 807, ♀. Upper Karakash Valley, October 10, 1873 (received from J. Biddulph).

Nos. 1426-1436, ♂. Tarbashi, March 28, 1874.

I extract the following note from my 'Catalogue,' founded in great part on the specimens collected by the present Expedition:—"The specimen described is a female bird obtained by Mr. W. T. Blanford in the Kangra Lama Pass, Sikkim, on October 5, 1870. Two male specimens procured on the same date by Mr. H. J. Elwes have more rosy margins to the feathers of the rump, but are in general respects similar to the female described. Both are beginning to moult; and instead of the uniform ashy head, they have tawny-buff feathers with black bases, foreshadowing the appearance of the *first winter plumage of the young*. This we also know from the series collected in October by Dr. Stoliczka during the second Yarkand Expedition. The whole upper surface is sandy brown, with darker brown centres to the feathers of the mantle and back, the lower back having rosy ends to the feathers; wings and tail as in the adult bird, but all the feathers obscured by sandy-buff margins; under surface of body plain sandy buff, more ashy on the throat and breast. Some of the specimens have a faint rosy tinge on the lesser and median wing-coverts; in others, mostly females, this is absent or replaced by saffron-yellow, the rosy colour of the lower back being absent.

"The late Dr. Severtzoff recognized three forms of *M. brandti*, consisting of the typical species, *M. hæmatopygia*, and *M. pamirensis*; and Mr. Seebohm has kindly lent me the specimens on which these differences were founded, including the types of *M. pamirensis*. *M. brandti* is said to differ from the last-named species in having no red margins to the rump-feathers, and only a few red-marked feathers on the rump, the lesser wing-coverts being rosy in the male and buffy rufous in the female. The type of the latter is quite a young bird, which accounts for the absence of rosy colour. The true *M. hæmatopygia* is said by Severtzoff to resemble *M. brandti*, but has the whole of the rump rosy, with the tips of the feathers crimson; the lesser wing-coverts ashy, with no rosy on the margin.

"There seems to me to be nothing in these differences of plumage beyond what can be reasonably accounted for by age. In a large series, such as I have examined (over 50 skins), it is evident that very little stress can be placed on the amount of rose-colour on the rump. In young birds it is apparently feebly developed, and is sometimes absent altogether in winter plumage.

"The *winter plumage of the adults* differs from the summer plumage in being altogether more tawny buff, and the edges of the feathers becoming shed, the head, and gradually the back, get black; curiously enough, the red edgings to the wing-coverts are never seen in the black-headed stage, and hence Dr. Severtzoff contends that this form, the true *M. hæmatopygia*, is specifically distinct from *M. brandti* and *M. pamirensis*. The red margins to the wing-coverts are, however, so much more plain in the winter plumage, that I believe them to be characteristic of that season, being entirely lost by abrasion as the summer plumage is put on."

Colonel Biddulph's localities for the present species were Camp Tsúltak, Sept. 15, 1873, and Kúfelang on the 12th of June, 1874. He writes:—"I first met with this crossing the Sakti Pass. It was in large flocks in October in the lower part of the Karakash valley at about 12,000-13,000 feet. We saw it again on our way to Wakhan in large flocks near Chehil



Gombaz; again it was seen in great quantities and very tame about our camp on the Yarkand river south of the Yangi Diwan Pass; and generally we always saw it in the hills at elevations above 12,000 feet or so."

Dr. Stoliczka notes in his 'Diary' that this Finch was "very common" at Kashmir jilga on the 11th of June, 1874.

Dr. Henderson says that "this species was first met with after crossing the Chang-là above Leh. From thence it was seen at almost every camping-ground, until the Expedition descended to the Karakásh river. It was never met with below 14,000 feet, and often as high as 17,000; at these great heights it was almost the only resident bird met with." Dr. Lansdell found the species south of the Muzart on the 12th of August.

Genus **RHODOPECHYS.**

66. **RHODOPECHYS SANGUINEA.** (Plate V.)

*Fringilla sanguinea*, Gould, P. Z. S. 1837, p. 127.

*Erythrospiza sanguinea* (Gould); Blanf. East. Persia, ii. p. 252 (1876).

*Rhodopechys sanguinea* (Gould); Sharpe, Cat. B. Brit. Mus. xii. p. 280 (1888).

Nos. 1461-1465, 1515, ad. Panjah, April 14, 1874.

No. 1468, ♂ ad. Panjah, April 15, 1874.—Iris dark brown; bill yellow, dusky towards the tip of upper mandible; feet blackish, claws also; tarsi paler, brownish; soles of feet dark. Length 7 inches, wing 4·2, tail 2·4, tarsus 0·8; expanse 12·8; bill from forehead 0·5, from gape 0·6; middle toe 0·8, hind toe 0·6; wings reach within 0·8 of end of tail.

No. 1467, ♂ ad. Panjah, April 15, 1874.—Iris dark brown; bill dusky yellow, blackish at tip; feet blackish brown; tarsi lighter brown; claws brown; balls on soles of feet livid yellowish. Length 6·7 inches, wing 4, tarsus 0·77; expanse 12; bill from forehead 0·45, from gape 0·58; middle toe 0·72, hind toe 0·52.

No. 1469, ad. Panjah, April 16, 1874.—Iris brown; bill dull yellow; feet dark brown; tarsi brown; soles yellowish. Length 6·7 inches, wing 4, tail 2·25, tarsus 0·8; expanse 12; bill from forehead 0·5, from gape 0·58; wings reach within 0·87 of end of tail; middle toe 0·8, hind toe 0·6.

No. 1475, ♂ ad. Panjah, April 16, 1874.—Bill dull yellow, dusky at tip of upper mandible; feet dark brown; tarsi paler; soles dusky, a little yellowish. Length 7 inches, wing 4·03, tail 2·4, tarsus 0·8; expanse 12·25; bill from forehead 0·52, from gape 0·6; wings reach within 0·95 of end of tail.

Nos. 1551, 1553. Panjah, April 25, 1874.

The adult females differ from the males in having the black crown less distinct and obscured with sandy-brown edges to the feathers. They have much less rose-colour on the rump and on the wings, with a distinct patch of white at the base of the outer secondaries. The sandy-brown colour of the throat and sides of the body is paler than in the male and without any black streaks.

The immature males (which probably breed before they have got their full plumage) have the throat and sides of the body as in the adult male, dark sandy brown with black shaft-lines. The head is a little blacker than in the old female, and there is very little of the white patch at the base of the secondaries, in this respect resembling the old male.

Dr. Stoliczka writes in his 'Diary':—"Panjah, April 15. I got several specimens of

a Finch to-day, something like the Rosy Bullfinch, but larger, and it has not the deep tone of the latter, but the comparatively loud chirp of a *Fringilla*. There was a flock of them about the fort: perhaps they are permanent inhabitants here."

Colonel Biddulph writes:—"We met with this only at Panjah in Wakhan, in April—and there we only saw one large flock, which used to come every morning and settle on some bare ground near our camp, until we had shot most of them. The elevation of the place at which we shot them was 9000 feet."

Genus **RHODOSPIZA.**

67. RHODOSPIZA OBSOLETA.

*Fringilla obsoleta*, Licht. in Eversm. Reis. Anhang, p. 132 (1823).

*Erythrospiza obsoleta* (Licht.); Severtz. Turkest. Jevotn. p. 64 (1873); Dresser, Ibis, 1875, p. 247; Scully, Str. F. iv. p. 168 (1876); Blauf. East. Persia, ii. p. 352, pl. xvii. (1876); Prjev. in Rowley's Orn. Misc. ii. p. 303 (1877); C. Swinh. Ibis, 1882, p. 114; Menzb. Ibis, 1885, p. 353; Scully, J. A. S. Beng. lvi. p. 84 (1887).

*Rhodospiza obsoleta*, Sharpe, Cat. B. Brit. Mus. xii. p. 282 (1888); id. Trans. Linn. Soc. (2) Zool. v. p. 80 (1889).

No. 890, ad. Sanju, October 28, 1873.—Iris coffee-brown; bill black, paler about the middle; feet horny brown. Length 6·3 inches, wing 3·55, tail 2·7, tarsus 0·68; expanse 10·6; bill from forehead 0·4, from gape 0·55; length of foot 1·25.

No. 922, ad. Sanju, October 29, 1873.

Nos. 932, 937, ad. Sanju, October 30, 1873.

Nos. 940, 944, ad. Sanju, October 31, 1873.

No. 934, ad. Oi-tográk, November 3, 1873.

Nos. 975–977, ad. Kárghalik, November 6, 1873.

Nos. 990, 992, ad. Yarkand, November 10, 1873.

No. 1056, ad. Yarkand, November 24, 1873.

No. 1380, ad. Fyzabad, E. of Kashghar, March 3, 1874.

No. 1737, ad. Yarkand, May 20, 1874.

Nos. 792, 794, ad. Yarkand, May 26, 1874.

Nos. 1803, 1804, ad. Kárghalik, May 29, 1874.

Nos. 1806, 1807, ad. Kárghalik, May 29, 1874.

Nos. 1822, 1825, 1827, 1828, ad. Kárghalik, May 30, 1874.

Colonel Biddulph sends the following note:—"We first met with this at Sanju in November, and on the march thence to Yarkand. During the winter it was not obtained in Kashghar, but we found it very common throughout the plains of Yarkand, and right up to the foot of the hills during May and June.

"This bird has a peculiar piping note and the people are very fond of keeping it in cages. We never saw it high up in the hills. It is a true Finch, rarely seen on the ground, never in flocks, but always in pairs."

Dr. Scully found this species breeding in May and June. He writes:—"Numerous in the plains of Kashgharia, where it is a permanent resident. This species was common at Kashghar in winter, where it frequents the hedges, often in company with the Sparrow (*Passer montanus*). Near Yarkand in summer it was found about trees, in orchards, and in clumps of poplars. It has a very sweet song, and feeds entirely on seeds. The Turki name for the species is *Tumochuk*."

Dr. Stoliczka says in his 'Diary' that he got two nests and eggs near Yarkand on the 23rd of May. One nest was in a vine-bush about eight feet above the ground, and one in a mulberry-tree about twenty feet above the ground. The nest was large, composed outside of thin twigs of a thorny bush, inside with a thick lining of cotton and old rags and thread. The whole nest is somewhat loosely or carelessly made, roundish, and about an inch deep, but three inches wide. There were from four to five eggs in a nest; one had nearly developed young, so the bird must begin breeding about the beginning of May. The eggs are pale bluish, with some short streaks or dots of dark brown round the thicker end.

Genus **BUCANETES.**

68. **BUCANETES MONGOLICUS.**

*Carpodacus mongolicus*, Swinh. P.Z. S. 1870, p. 447, 1871, p. 480; Severtz. Ibis, 1883, p. 56; Scully, Str. F. iv. p. 169 (1876).

*Erythrospiza mongolica* (Swinh.), Prjev. in Rowley's Orn. Misc. ii. p. 303 (1877); Finsch, Verhandl. z.-b. Gesellsch. Wien, xxix. p. 212 (1879); Barnes, Str. F. ix. p. 457 (1880); Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 93; Sharpe, Cat. B. Brit. Mus. xii. p. 287 (1888); Oates, Faun. Brit. Ind., Birds, ii. p. 222 (1890).

*Erythrospiza incarnata*, Severtz. Turkest. Jevotn. pp. 64, 117 (1873); Dresser, Ibis, 1875, p. 245.

*Bucanetes mongolicus*, Menzbier, Ibis, 1885, p. 353.

No. 625, juv. Leh, September 14, 1873.

No. 728, ♂ juv. Muglib, east of Tankisi, September 18, 1873.—Iris brown; bill pale fleshy brownish; feet fleshy yellowish brown, soles orange. Length 6.2 inches, wing 3.3, tail 2.35, tarsus 0.9.

No. 729, ♀ juv. Muglib, September 18, 1873.

No. 887. Sanju, October 27, 1873.

No. 891, ♂ ad. Sanju, October 28, 1873.—Iris brown; bill yellowish pale horny; feet horny brown; tarsi with a reddish tinge. Length 6.3 inches, wing 3.75, tail 2.32, tarsus 0.7.

Nos. 934, 941. Sanju, October 30, 1873.

Nos. 1133, 1135, 1147, 1148. Kashghar, December 11 to 15, 1873.

Nos. 1182–1192. Chakmak, January 7 to 9, 1874.

Nos. 1261, 1262, 1270, 1281, 1282. Kashghar, January 24 to 31, 1874.

Nos. 1306, 1328, 1331, 1332, 1334, 1347, 1349, 1351, 1352. Kashghar, February 4 to 13, 1874.

No. 1439. Tashkúrhán, March 30, 1874.

No. 1519. Panjah, April 23, 1874.

The young bird resembles the adult female and has very little rosy colour on the quills, and none at all on the coverts or face. The upper surface and the wing-coverts are sandy brown, and the whole breast and flanks are suffused with sandy buff.

In the 'Catalogue of Birds' I adopted the generic name *Erythrospiza* for the Trumpeter Bullfinches. Count Salvadori, however, has written to me as follows:—"The genus *Erythrospiza*, Bp., was established much earlier than in the 'Fauna Italica.' You will find it in the 'Osservazioni al Regno Animale del Baron Cuvier,' p. 80 (1840), and it is an equivalent of *Carpodacus* of Kaup. You have not noticed that Bonaparte in the 'Fauna Italica,' both in the 'Introduzione' and in the text of *E. githaginea*, says that this species is not a typical *Erythrospiza*. So the genus *Bucanetes* must be used."

Dr. Stoliczka, in his 'Diary,' notes that the present species was very common near Sanju on the 27th of October, and on the 20th of the same month he mentions it as the only species he noticed on the Sanju hills.

Dr. Scully writes:—"This species is only a winter visitant to Eastern Turkestan, and even then it is not common; it is said to migrate eastwards, towards China, in the spring. Near Yarkand it frequents a sort of desert bush called *Kamghak*, on the seeds of which it appears to feed. It is rather a favourite cage-bird with the Yarkandis, on account of its sweet song."

Colonel Biddulph sends this note:—"We first obtained one or two specimens of this species at Tanksi (13,000 feet) in September. Again in the Karakash valley in October several specimens were procured on our arrival at Sanju in the beginning of November; they were seen settling in immense flocks in short grass in the morning. A few specimens were obtained during the winter in Kashghar, and in Wakhan in April we found it very common. They are chiefly ground-birds."

#### Genus **PETRONIA.**

##### 69. **PETRONIA PETRONIA.**

*Fringilla petronia*, Linn. S. N. i. p. 322 (1766).

*Passer petronia* (L.); Severtz. Turkest. Jevotn. p. 64 (1873); Dresser, Ibis, 1875, p. 420.

*Pyrgita petronia* (L.); Prjev. in Rowley's Orn. Misc. ii. p. 288 (1877); Radde, Orn. iii. p. 481 (1887).

*Petronia stulta* (Gm.); Blanf. East. Persia, ii. p. 255 (1876); Bidd. Ibis, 1881, p. 79; Scully, *ibid.* p. 574; C. Swinh. Ibis, 1882, p. 113; Oates, Faun. Brit. Ind., Birds, ii. p. 243 (1890).

*Petronia brevirostris*, Tacz. Bull. Soc. Zool. France, i. p. 179 (1876).

*Petronia petronia*, Sharpe, Cat. B. Brit. Mus. xii. p. 289 (1888).

No. 1210. Kashghar, January 19, 1874. Length 6·5 inches, wing 4, tail 2·33, tarsus 0·8; expanse 12·2; bill from front 0·57, from gape 0·7; length of foot 1·4. Iris yellowish brown; bill bluish dusky, pale below; feet fleshy brown, more dusky on the soles.

No. 1228. Kashghar, January 23, 1874.

No. 1264, 1265, 1268, 1269. Kashghar, January 24, 1874.

No. 1273. Kashghar, January 25, 1874.

No. 1330. Kashghar, February 10, 1874.

#### Genus **PASSER.**

##### 70. **PASSER MONTANUS.**

*Fringilla montana*, Linn. Syst. Nat. i. p. 324 (1766).

*Passer montanus* (L.); Horsf. & Moore, Cat. B. Mus. E. I. Co. ii. p. 500 (1856); Severtz. Turkest. Jevotn. p. 64 (1873); Hume & Henders. Lahore to Yark. p. 254 (1873); Dresser, Ibis, 1875, p. 239; Blanf. East. Persia, ii. p. 255 (1876); Scully, Str. F. iv. p. 178 (1876); Tacz. Bull. Soc. Zool. France, i. p. 178 (1876); Prjev. in Rowley's Orn. Misc. ii. p. 294 (1877); Finsch, Verh. z.-b. Ges. Wien, 1879, p. 210; Wardlaw Ramsay, Ibis, 1880, p. 64; St. John, t. c. p. 145; Homeyer & Tancreé, MT. orn. Ver. Wien, 1883, p. 89; Radde, Orn. iii. p. 482 (1887); Sharpe, Cat. B. Brit. Mus. xii. p. 302 (1888); Oates, Faun. Brit. Ind., Birds, ii. p. 240 (1890).

No. 879. Kiwáz, October 26, 1873.

Nos. 880, 884, 885, ad. Kiwáz, October 26, 1873.

Nos. 973, 974, ad. Kárghalik, November 6, 1873.

No. 1109, ad. Yangihissár, December 2, 1873.

No. 1204, ad. Kashghar, January 15, 1874.

No. 1206, ad. Kashghar, January 17, 1874.

No. 1212, ad. Kashghar, January 19, 1874.

Nos. 1224–1226, ad. Kashghar, January 23, 1874.

One of these is a cream-coloured variety. Dr. Stoliczka notes: "I saw another entirely white."

Nos. 1230, 1246, 1248, 1249, 1259, ad. Maralbashi, January 1874.

Dr. Stoliczka mentions in his 'Diary' that the Tree-Sparrow first became abundant at Kiwáz on the 20th of February. On the 14th of January he saw the first *Passer montanus* pairing and selecting a place for a nest. On the 22nd of May he procured a number of eggs at Yarkand, and writes in his 'Diary':—"The eggs are rather large, and vary much in marking. It builds in houses, but prefers holes of trees, and makes a large nest, inside thickly lined with wool, cotton, rags, &c. I saw as many as twelve eggs in one nest, and I wonder whether they are all from the same bird."

Dr. Scully states that the Tree-Sparrow breeds in Eastern Turkestan from May to August, and he believes that it rears two broods in the year. It is "the Common Sparrow of Eastern Turkestan, where it is a permanent resident. It abounds everywhere near inhabited places and cultivated fields, up to an elevation of about 7500 feet. The Turki name for the Tree-Sparrow is 'Ak Kuchkach,' i. e. 'The White Bird,' in Khokand, and by the Andijanians it is called 'Chumchuk,' but a Yarkandi would not understand what was meant by the latter name."

Dr. Henderson writes:—"The Tree-Sparrow of Europe is the House-Sparrow of the city of Yarkand, where it is almost as familiar and impudent as the English or Indian House-Sparrow. It was seldom noticed in the fields, or indeed anywhere except in and about the houses. In Turki it is called 'Chum-Chuk.'"

#### 71. PASSER DOMESTICUS.

*Fringilla domestica*, Linn. Syst. Nat. i. p. 323 (1766).

*Passer domesticus* (L.) ; Severtz. Turkest. Jevotn. p. 64 (1873) ; Dresser, Ibis, 1875, p. 239 ; Blanf. East. Persia, ii. p. 254 (1876) ; Tacz. Bull. Soc. Zool. France, i. p. 78 (1876) ; Finsch, Verh. zool.-bot. Gesellsch. Wien, 1879, p. 209 ; C. Swinh. Ibis, 1882, p. 112 ; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 89 ; Sharpe, Cat. B. Brit. Mus. xii. p. 308 (1888) ; Oates, Faun. Brit. Ind., Birds, ii. p. 236 (1890).

*Passer indicus*, J. & S. ; Hume & Henders. Lahore to Yark. p. 252 (1873) ; Blanf. East. Persia, ii. p. 254 (1877) ; Wardlaw Ramsay, Ibis, 1880, p. 63 ; Bidd. Ibis, 1881, p. 79 ; Scully, ibid. p. 573 ; Bidd. Ibis, 1882, p. 281 ; Scully, J. A. S. Beng. lvi. p. 85 (1887) ; Radde, Ornith., iii. p. 482 (1887) ; Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 79 (1889).

*Passer domesticus indicus*, Seebohm, Ibis, 1883, p. 8.

Nos. 245, 246, ♂ ♀ ad. Srinagar, August 2, 1873.

No. 534, ♂ ad. Saspúl, Ladak, August 25, 1873.

Nos. 556, 561, ♂, 563, 567, ♀ ad. Leh, August 28, 1873.

The bright-coloured race of the Common Sparrow, *Passer indicus* of authors, was not met with by the Expedition beyond Leh, and Dr. Henderson states that it was never seen in Yarkand ; nor is the species in Dr. Scully's list.



72. PASSER HISPANIOLENSIS.

*Fringilla hispaniolensis*, Temm. Man. d'Orn. p. 353 (1820).

*Passer salicarius*, Keys. u. Blas.; Severtz. Turkest. Jevotn. p. 64 (1873); Dresser, Ibis, 1873, p. 239; Blanf. East. Persia, ii. p. 255 (1876).

*Passer hispaniolensis* (T.); Bidd. Ibis, 1881, p. 79; Scully, t. c. p. 573; C. Swinh. Ibis, 1882, p. 113; Scully, J. A. S. Beng. lvi. p. 85 (1887); Sharpe, Cat. B. Brit. Mus. xii. p. 318 (1888); id. Trans. Linn. Soc. (2) Zool. v. p. 79 (1889); Oates, Faun. Brit. Ind., Birds, ii. p. 239 (1890).

*Passer salicicolus*, Bp.; Scully, Str. F. iv. p. 164 (1876); Wardlaw Ramsay, Ibis, 1880, p. 64.

Nos. 1188, 1189, ♂. Chakmak, January 7, 1874.

No. 1415, ♂. Sasstekke, March 23, 1874.—Length 6 inches, wing 3·3, tail 2·5, tarsus 0·8; expanse 10; bill from front 0·45, from gape 0·6. Iris dark brown; bill brownish dusky, yellow at lateral base; feet pale brown.

No. 1241. Maralbashi, January 1874.

No. 1376. Tigdu, February 25, 1874.

No. 1898. Panjah, April 14–23, 1874.

Colonel Biddulph writes:—"Stoliczka got the first specimen at the commencement of January 1874, at the foot of the Thian-Shan range. Later a few specimens were got near Kashghar."

According to Dr. Scully, this Sparrow is tolerably common in the plains and is apparently a permanent resident in Eastern Turkestan. It nests in May and June, and the Turki name is "Tarachi."

73. PASSER CINNAMOMEUS.

*Pyrgita cinnamomea*, Gould, P. Z. S. 1835, p. 185.

*Passer cinnamomeus* (Gould); Hume & Henders. Lahore to Yark. p. 252, pl. 25 (1873); Sharpe, Cat. B. Brit. Mus. xii. p. 325 (1888); Oates, Faun. Brit. Ind., Birds, ii. p. 240 (1890).

No. 2, ♂ ad. Murree, June 20, 1873.

Nos. 46, 51, ♂ ad. Murree, June 26, 1873.

No. 67, ♀ ad. Murree, June 30, 1873.

Nos. 345, 346. Sonamarg, August 12, 1873.

Colonel Biddulph states that this Sparrow was common at Sonamarg, but was not seen elsewhere by him.

74. PASSER AMMODENDRI.

*Passer ammodendri*, Severtz. Turkest. Jevotn. pp. 64, 115 (1873); Dresser, Ibis, 1875, p. 239; Prjev. in Rowley's Orn. Misc. ii. p. 295 (1877); Sharpe, Cat. B. Brit. Mus. xii. p. 337 (1888).

*Passer stoliczkæ*, Hume, Str. F. 1874, p. 516.

No. 1142, ♂. Kashghar, December 13, 1873.

No. 1155, ♂. Kashghar, December 1, 1873.—Length 6·8 inches, wing 3·26, tail 2·6, tarsus 0·8; expanse 9·7; bill from front 0·4, from gape 0·36. Iris dark chocolate-brown; bill pale horny, yellowish at sides of base, paler below; feet fleshy white. Wings reach within 1·8 inch of end of tail.

No. 1156, ♀. Kashghar, December 17, 1873.—Length 6·9 inches, wing 3·15, tail 2·65, tarsus 0·8; expanse 9·75; bill from front 0·4, from gape 0·55. Iris dark chocolate-

brown; bill pale fleshy, tinged with dusky yellowish at the lateral bases; feet pale tinged with dusky; claws dark horny.

No. 1168, ♂. Kashghar, December 19, 1873.

No. 1208, ♂. Kashghar, January 18, 1874.

Nos. 1229, 1231, 1247, ♂, 1250, ♀, 1254-55, 1257. Maralbashi, January 1874.

No. 1294, ♂. Kashghar, January 2, 1874.

No. 1304, ♂. Kashghar, January 3, 1874.

No. 1338, ♂. Kashghar, March 11, 1874.

Nos. 1341, ♀, 1345. Kashghar, February 12, 1874.

No. 1369, ♂. Aioksogon, February 19, 1874.

No. 1372. Jigda, February 22, 1874.

No. 1378. Jigda, February 26, 1874.

“In December,” writes Colonel Biddulph, “one or two specimens were obtained near Kashghar. In January I found it tolerably plentiful along the road to Maralbashi. I saw them both feeding on the ground and perched in bushes. As far as I can remember, they were always found singly or in pairs.”

#### Genus **SERINUS**.

##### 75. **SERINUS PUSILLUS**.

*Passer pusillus*, Pall. Zoogr. Rosso-Asiat. ii. p. 28 (1811).

*Serinus pusillus* (Pall.) ; Dresser, Ibis, 1875, p. 243 ; Sharpe, Cat. B. Brit. Mus. xii. p. 373 (1888).

*Metoponia pusilla* (Pall.) ; Hume & Henders. Lahore to Yark. p. 259 (1873) ; Stoliczka, Str. F. ii. p. 464 (1874) ; Blanford, East. Persia, ii. p. 250 (1876) ; Wardlaw Ramsay, Ibis, 1880, p. 67 ; Bidd. Ibis, 1881, p. 86 ; Scully, t. c. p. 578 ; C. Swinh. Ibis, 1882, p. 115 ; Bidd. t. c. p. 284 ; Oates, Faun. Brit. Ind., Birds, ii. p. 230 (1890).

*Orægithus pusillus* (Pall.) ; Severtz. Turkest. Jevotn. pp. 64, 116 (1873).

No. 412, ♂. Mataian, August 15, 1873.—Length 5·2 inches, wing 3·05, tail 2·2, tarsus 0·5; expanse 9; bill from front 0·3, from gape 0·4; length of foot 1·1. Iris brown; bill black; feet black.

Nos. 450, 453, imm., 454. Chiliscambo, August 18, 1873.

No. 460. Kargil, August 19, 1873.

No. 779, juv. Chagra, September 21, 1873.

Nos. 1420, ♀, 1424, ♂. Tarbashi, March 27, 1874.

No. 1559, ♂. Panjah, April 25, 1874 (*Col. Jordan*).

Nos. 1575-1579. Langarkish, April 26, 1874.

Dr. Stoliczka records this species in his ‘Diary’ as a permanent resident at Panjah.

Colonel Biddulph’s localities are the Nubra Valley on the 25th of June, the specimens being in full breeding-plumage; Kargil on the 9th of July; and Panjah in Wakhan in April. He writes:—“We found this species everywhere up to 10,000 feet in the hills south and west of Turkestan and Wakhan in spring; also in Ladak, especially about Kargil in July. I did not see any in the plains of Turkestan, but I believe they breed there in the summer.”

Dr. Henderson states that this Finch was met with in immense flocks, both in July and October, almost throughout Ladák, from Dras to the Fota-là. It probably breeds in May and not impossibly in Ladak.

Genus **CARPODACUS.**

76. **CARPODACUS ERYTHRINUS.**

*Loxia erythrina*, Pall. N. Comm. Acad. Sci. St. Petersburg. xiv. p. 587, pl. 23. fig. 1 (1770).

*Carpodacus erythrinus* (Pall.); Severtz. Turkest. Jevotn. p. 64 (1873); Hume & Henders. Lahore to Yark. p. 259 (1873); Dresser, Ibis, 1875, p. 245; Scully, Str. F. iv. p. 170 (1876); Tacz. Bull. Soc. Zool. France, i. p. 181 (1876); Prjev. in Rowley's Orn. Misc. ii. p. 181 (1877); Wardlaw Ramsay, Ibis, 1877, p. 461, 1880, p. 67; Bidd. Ibis, 1881, p. 83; Scully, ibid. p. 577; C. Swinh. Ibis, 1882, p. 114; Severtz. Ibis, 1883, p. 10; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 90; Sharpe, Cat. B. Brit. Mus. xii. p. 391 (1888); id. Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 80 (1889); Oates, Faun. Brit. Ind., Birds, ii. p. 219 (1890).

Nos. 395, 397, 401, ♂ ad. Mataian, August 14, 1873.

Nos. 414, 415, ♀ ad. Mataian, August 15, 1873.

No. 410, ♂ ad. Mataian, August 15, 1873.—Iris brown; bill horny; feet horny brown. Length 6·5 inches, wing 3·5, tail 2·45, tarsus 0·7; expanse 10·4; bill from forehead 0·45, from gape 0·55.

No. 429, ♂ ad. Tashgam, August 17, 1873.

No. 477, ♂ ad. Shargol, August 20, 1873.

No. 494, ♂ ad. Kharbu, August 21, 1873.

No. 471, ♀ ad. Leh, August 29, 1873.

No. 588, ♀ ad. Leh, August 30, 1873.

No. 605, ♂ ad. Leh, August 31, 1873.

No. 607, ♂ ad. Leh, September 2, 1873.

No. 622, ♂ ad. Leh, September 4, 1873.

Nos. 717, 718, ♀ juv. Tanksi, September 17, 1873.

No. 773, juv. Chogra, September 21, 1873.

No. 1856, ♂ ad. S.E. of Chiklik, June 4, 1874.

No. 1861, ♂ ad. Duba, June 6, 1874.

In his 'Diary' Dr. Stoliczka notes that this species was very common at the Guláb-bágh in Leh on the 31st August, 1873.

Colonel Biddulph sends the following note:—"First met with directly we crossed the Zoji-lá into Ladák about the middle of August, and we found them extraordinarily numerous between Dras and the Zoji-lá in July on our return. The species was seen nowhere else, except in the Kulustan valley in June, and there it was common."

Dr. Scully writes:—"This species was first observed at Sanju, where it was flitting about among the trees; it was seen on several occasions in the hills among the bushes, and was tolerably numerous in the *Hololachne* bushes on the banks of the Karakash river near Sháhidúla. It had a tolerably loud sweet note." Dr. Henderson states that this *Carpodacus* was very common in Kashmir in June and July, from the Sind Valley; and in Ladák to the first pass beyond Leh. The birds were in small flocks, and only males were observed, so that the hen birds were probably sitting. It was not observed by him in the high desert regions, and when the Expedition returned none were seen in either Ladák or Kashmir.

## 77. CARPODACUS SEVERTZOVII.

*Carpodacus rubicillus* (nec Gldenst.) ; Severtz. Turkest. Jevotn. p. 64 (1873) ; Hume & Henders. Lahore to Yark. p. 258 (1873) ; Dresser, Ibis, 1875, p. 245 ; Scully, Str. F. iv. p. 169 (1876) ; Tacz. Bull. Soc. Zool. France, i. p. 182 (1876) ; Prjev. in Rowley's Orn. Misc. ii. p. 298 (1876) ; Severtz. Ibis, 1883, p. 81 ; Menzbier, Ibis, 1885, p. 353.

*Carpodacus severtzovi*, Sharpe, P. Z. S. 1886, p. 354 ; id. Cat. B. Brit. Mus. xii. p. 400 (1888) ; Oates, Faun. Brit. Ind., Birds, ii. p. 220.

No. 854, ♂. South of Sanju Pass, October 22, 1873.—Length 8·5 inches, wing 4·5, tail 4, tarsus 0·85 ; expanse 13·6. Iris dark brown ; bill greenish horny ; feet dark horny.

No. 855, ♀. South of Sanju Pass, October 22, 1873.—Length 8·25 inches, wing 4·25, tail 3·5, tarsus 0·85 ; expanse 13·25 ; length of foot 1·5. Iris, bill, and feet the same as in the male.

Nos. 875, 876, 877, 878, ♀. Kiwáz, October 26, 1873.

Nos. 1437, 1438, ♂ ♀. Tashkrghán, March 30, 1874.

No. 1460. Panjah, April 13, 1874.

No. 1518. Panjah, April 14–23, 1874.

Colonel Biddulph has furnished us with the accompanying note:—"Both coming and going we found this common in the Karakash Valley below Sháhídla (11,500 feet) and on the Yarkand side of the Sanju Pass (9000 feet) ; also in Wakhán (9000 feet) ; again in the Kulustan Valley (10,000–11,000 feet) coming up to the Yangidewán Pass, where they were not very common. They were very abundant in June at Tutujalak (13,000 feet) between the Nobra Valley and the Tussia Pass."

Dr. Henderson procured a specimen on the 9th of October near the Pangong Lake, and two young birds were also obtained on the Arpalák River on the 13th of August, and he remarks that the species probably breeds in the neighbourhood. Dr. Scully writes:—"A pair of this fine species was first observed in a rocky gorge between Mazar and the Chuchu Pass ; they hopped from the buckthorn bushes growing by the side of a small mountain-stream and mounted up the hillside. After that this species was often seen along the banks of the Karakash from Kurgan Ali Nazar to Oibuk (elevation 10,700 to 11,700 feet). The arrival of our camps at Toghrasu on the 22nd August greatly disturbed a family of this Rose-Finch ; the male bird especially was very excited, flying backwards and forwards along the hillside and crying shrilly to its two youngsters to follow it out of reach of danger. Nearly all the birds of this species which I shot were found to have the bills stained a sort of pink colour ; this was probably due to the birds having been feeding on some kind of berry, as the colour rubbed off on wetting."

## 78. CARPODACUS RHODOCHLAMYS.

*Pyrrhula (Corythus) rhodochlamys*, Brandt, Bull. Sci. Acad. Imp. St. Pétersb. 1843, p. 27.

*Carpodacus rhodochlamys* (Brandt) ; Severtz. Turkest. Jevotn. p. 64 (1873) ; Dresser, Ibis, 1875, p. 245 ; Menzbier, Ibis, 1885, p. 353 ; Sharpe, Cat. B. Brit. Mus. xii. p. 406 (1888).

*Propasser rhodochlamys* (Brandt) ; Stoliczka, Str. F. iii. p. 219 (1875).

*Propasser rhodometopus*, Bidd. Ibis, 1881, p. 156, pl. vi.

No. 722. Tanksi, September 17, 1873.

No. 726. Tanksi, September 17, 1873.—Bill pale horny ; feet fleshy brown ; iris brown. Length 8·5 inches, wing 4·25, tail 3·63, tarsus 0·9.

No. 757. Lukung, September 20, 1873.

Nos. 1095, 1098. Yangihissár, December 1, 1873.

Nos. 1103, 1105, 1106, 1108. Yangihissár, December 2, 1873.

Nos. 1141, 1143. Kashghar, December 13, 1873.

No. 1146. Kashghar, December 14, 1873.

No. 1216, ♂. Kashghar, January 20, 1874.—Length 8 inches, wing 3·5, tail 3·45, tarsus 0·9; expanse 10·75; bill from front 0·5, from gape 0·64; length of foot 1·5; wings reach within 2·4 of end of tail. Iris brown; bill dusky, paler below; feet horny brown.

No. 1217, ♀. Kashghar, January 20, 1874.—Length 7·75 inches, wing 3·3, tail 3·2, tarsus 0·9; expanse 10·5; bill from front 0·5, from gape 0·62; length of foot 1·5; wings reach within 2·1 of end of tail. Iris brown; bill greenish dusky, pale below; feet brown; tarsi fleshy.

No. 1371. Jaitupa, February 21, 1874.

79. *CARPODACUS STOLICZKÆ*. (Plate VI.)

*Propasser stoliczkæ*, Hume, Str. F. ii. p. 523 (1874); Severtz. Str. F. 1878, p. 431.

*Carpodacus stoliczkæ*, Sharpe, Cat. B. Brit. Mus. xii. p. 403 (1888).

No. 1855, ♂. Chiklik, June 4, 1874. (Type of species.)

No. 1857. Chiklik, June 4, 1874.

Colonel Biddulph procured a female in the Kulustan Valley on the 6th of June. He says that it was tolerably common there, but was not noticed anywhere else. This specimen he gave to the late Mr. Mandelli and it passed with the rest of the Mandelli Collection into the Hume Collection.

Genus **PYRRHULA**.

80. *PYRRHULA AURANTIACA*.

*Pyrrhula aurantiaca*, Gould; Hume & Henders. Lahore to Yark. p. 258 (1873); Stoliczka, Str. F. ii. p. 461 (1874); Bidd. Ibis, 1881, p. 82; Scully, t. c. p. 577; Sharpe, Cat. B. Brit. Mus. xii. p. 455 (1888).

Procured by Colonel Biddulph on the return journey at Sonámarg on the 11th of July. He writes to Mr. Hume:—"On our way up on the 12th of August we halted here for three days on purpose to get this bird, as you had requested Stoliczka to do so; but at that time not one was to be seen."

Dr. Henderson observes:—"This beautiful species was very common about the head of the Sind Valley. It was met with on the roadside in June and in October, and was quite tame and fearless. It associated in small flocks about six in number and flew from bush to bush, feeding on berries. It was met with in no other locality. The elevation at which it occurred was from about 7000 to 8000 feet."



Subfamily *EMBERIZINÆ*.Genus **PYRRHULORHYNCHA**.81. **PYRRHULORHYNCHA PYRRHULOIDES.**

*Emberiza pyrrhuloides*, Pall. Zoogr. Rosso-Asiat. ii. p. 49 (1811); Severtz. Turkest. Jevotn. p. 64 (1873); Dresser, Ibis, 1875, p. 249; Scully, Str. F. iv. p. 166 (1876); Homeyer & Tancré, MT. orn. Ver. Wien, 1883, p. 90.

*Schœnicola pyrrhuloides* (Pall.); Tacz. Bull. Soc. Zool. France, i. p. 177 (1876).

*Pyrrhulorhyncha pyrrhuloides*, Finsch, Verh. zool.-bot. Ges. Wien, 1879, p. 106; Sharpe, Cat. B. Brit. Mus. xii. p. 475 (1888).

Nos. 1240, 1242. Marálbáshi, January 1874.

No. 1283. Kashghar, January 31, 1874.—Iris dark hazel; feet blackish brown; tarsi brown.

Nos. 1708, 1711. Yarkand, May 22, 1874.

Nos. 1775, 1780, 1781. Yarkand, May 24, 1874.

In Dr. Stoliczka's 'Diary' occurs the following:—"Yarkand, May 22nd. I got the eggs of the Black-headed Bunting (*E. pyrrhuloides*), which Biddulph brought first from Marálbáshi. It is common here. I got altogether three nests; two had four and one five eggs. The nest is a nicely-made, round, cup-shaped structure, composed outside of coarse *Juncus*-stalks, inside of fine grass with a thin lining of horse-hair. The nest is perfectly round, inside about  $1\frac{3}{4}$  inch deep, with an inside diameter of  $2\frac{1}{4}$  inches. The eggs are greenish grey, marbled and streaked with blackish brown of a deeper and paler shade, the colouring being more abundant towards the broader end."

Dr. Scully's note is as follows:—"The first specimen was shot at Beshkant in the beginning of February in waste ground overgrown with small bushes. Three other specimens were obtained near Yarkand in April. This bird frequents the edges of marshy ground and rice-fields, breeds in Kashgharia, and is probably a permanent resident. The Turki name for this Bunting is 'Karabash Kuchkach,' the 'Black-headed Bird.' The Yarkandi Shikaris say that the nest of this species is always placed in *Yekan*, i. e. 'reed-beds.'"

Genus **EMBERIZA**.82. **EMBERIZA SCHÆNICLUS.**

*Emberiza schœniclus*, Linn. Syst. Nat. i. p. 311 (1766); Severtz. Turkest. Jevotn. p. 64 (1873); Finsch, Verh. z.-b. Ges. Wien, 1879, p. 217; Bidd. Ibis, 1881, p. 81; Scully, t. c. p. 575; Homeyer & Tancré, MT. orn. Ver. Wien, 1883, p. 90; Sharpe, Cat. B. Brit. Mus. xii. p. 480 (1888).

*Cynchramus schœniclus* (L.); Prjev. in Rowley's Orn. Misc. ii. p. 309 (1877).

*Schœnicola arundinacea* (Gm.); Tacz. Bull. Soc. Zool. France, i. p. 177 (1876).

*Emberiza schœnicola*, Scully, Str. F. iv. p. 166 (1876); C. Swinh. Ibis, 1882, p. 84.

No. 925, ♂ juv. Sanju, November 1, 1873.

No. 930. Khushtágh, November 2, 1873.

No. 968. Kárgchalik, November 7, 1873.

Nos. 1001, 1002, 1006, 1008, 1011. Yarkand, November 12, 1873.

No. 1039, ♂ hiem. Yarkand, November 22, 1873.

All the above specimens appear to be males in winter plumage. No. 1001 may be a female.

No. 1167, ♂. Kashghar, December 19, 1873.

No. 1272, ♂. Kashghar, January 25, 1874.—Bill dusky pale bluish, the culmen blackish; feet fleshy brown. Length 6·8 inches, wing 3·56, tail 3, tarsus 0·8.

Nos. 1285, 1286, ♀. Kashghar, January 31, 1874.

No. 1300, ♂. Kashghar, February 3, 1874.

No. 1336, ♂. Kashghar, February 11, 1874.

Nos. 1342, 1344, ♀. Kashghar, February 12, 1874.

No. 1350, ♂. Kashghar, February 13, 1874.

No. 1382, ♂. Kashghar, March 8, 1874.

Nos. 1234, 1245, ♀, 1256, ♂. Marálbáshi, January 1874.

No. 1379, ♂. Faizabad, March 2, 1874.

The whole series is in winter plumage; nor do the males killed in the middle of February or in March show much sign of shedding the tips to the black feathers of the throat.

Colonel Biddulph procured specimens at Yarkand in November, and at Kashghar in December, February, and March, as well as at Marálbáshi. They were very common during the winter. He also noticed the species on the march near Kárgchalik in November.

According to Dr. Scully this species was "common near Yarkand in winter, and four specimens were preserved in January and February. It frequented hedges and small trees and was said by the Yarkandis to be a permanent resident; but I never observed it in summer." The Turki name for this bird is "Cha-Kuchkach."

### 83. EMBERIZA PUSILLA.

*Emberiza pusilla*, Pall. Reis. Russ. Reichs, iii. p. 697 (1776); Severtz. Turkest. Jevotn. p. 64 (1873); Dresser, Ibis, 1875, p. 249; Tacz. Bull. Soc. Zool. France, i. p. 177 (1876); Prjev. in Rowley's Orn. Misc. ii. p. 308 (1877); Wardlaw Ramsay, Ibis, 1877, p. 462; Finsch, Verh. z.-b. Ges. Wien, xxix. p. 216 (1879); Sharpe, Cat. B. Brit. Mus. xii. p. 487 (1888); Oates, Faun. Brit. Ind., Birds, ii. p. 254.

No. 845. South of Sanju Pass, Karakash Valley, October 22, 1873.—Length 5·35 inches, wing 2·75, tail 2·25; expanse 8·5. Bill greenish horny; feet brownish yellow.

An apparently adult bird in winter plumage.

### 84. EMBERIZA RUSTICA.

*Emberiza rustica*, Pall. Reis. Russ. Reichs, iii. p. 698 (1776); Tacz. Bull. Soc. Zool. France, i. p. 175 (1876); Finsch, Verh. z.-b. Ges. Wien, 1879, p. 216; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 90; Sharpe, Cat. B. Brit. Mus. xii. p. 491 (1888).

No. 919, ♂ hiem. Sanju, October 29, 1873.—Length 6·2 inches, wing 3·1, tail 2·4, tarsus 0·75; expanse 8·6; bill from front 0·4, from gape 0·5. Iris reddish brown; bill blackish horny, pale brown along the posterior culmen; lower mandible pale fleshy brown, dusky at the sides and tip; feet pale horny brown, with a very slight fleshy tinge. Wings reach within 1·35 inch of tip of tail.

No. 935, ♂ hiem. Sanju, October 30, 1873.

## 85. EMBERIZA LUTEOLA.

*Emberiza luteola*, Sparrm. Mus. Carls. fasc. iv. taf. 93 (1788); Dresser, Ibis, 1875, p. 249; Scully, Str. F. iv. p. 167; Severtz. Ibis, 1883, p. 60; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 90; Sharpe, Cat. B. Brit. Mus. xii. p. 506 (1888); id. Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 80 (1889).

*Emberiza brunneiceps*, Severtz. Turkest. Jevotn. p. 64 (1873).

*Euspiza luteola* (Sparrm.); Wardlaw Ramsay, Ibis, 1880, p. 66; Bidd. Ibis, 1881, p. 81; Scully, ibid. p. 575; C. Swinh. Ibis, 1882, p. 114; Bidd. ibid. p. 282; Scully, J. A. S. Beng. lvi. p. 85 (1887).

Nos. 1703, 1735, 1757, ♂, 1759, 1761, 1764. Yarkand, May 16 to 21, 1874.

Nos. 1785, 1787, 1788, ♂. South-west of Ighiz Yar, May 18, 1874.

Nos. 1694, 1695, ♂ ♀. Kizil, May 19, 1874.

No. 1837, ♀. Kugiár, June 1, 1874.

All birds in full breeding-plumage.

Colonel Biddulph writes:—"We never saw this Bunting during the winter or until May, when, on our return from the Pamir, we emerged from the hills. We first saw it at Ighiz Yar, and thenceforward noticed it in abundance everywhere in the plains and amongst cultivation. It was breeding."

Dr. Scully says:—"This species is a seasonal visitant to the plains of Eastern Turkestan, arriving about the end of April and leaving in September. The birds were numerous from the end of May to July near Yarkand. This Bunting breeds in May and June." He gives a full description of the nest and eggs.

On the 27th of May, Dr. Stoliczka writes in his 'Diary':—"Near Yarkand *Euspiza luteola* is building a nest in low bushes in open gardens." At Beshterek on the 31st of May he observes:—"A man brought a nest which he assured me was that of *E. luteola*, called *Sare kutshkajtsh*. The nest was on or very near the ground; made outside of very coarse grass, inside lined with hair of horse and other animals. It is only about 1 inch deep and about  $2\frac{3}{4}$  inches in diameter; somewhat loosely constructed, like that of a *Motacilla*. The eggs are whitish, dotted all over with brown, the dots most numerous round the thick end."

## 86. EMBERIZA HORTULANA.

*Emberiza hortulana*, L.; Severtz. Turkest. Jevotn. p. 64 (1873); Dresser, Ibis, 1875, p. 248; Blanf. East. Persia, ii. p. 259 (1876); Bidd. Ibis, 1881, p. 80; Scully, t. c. p. 574; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 90; Sharpe, Cat. B. Brit. Mus. xii. p. 530 (1888); id. Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 80 (1889).

No. 1709. Yarkand, May 22, 1874.

Dr. Scully notices the occurrence of the Ortolan Bunting in Gilgit during the time of passage. He says that his specimen was inseparable from European examples, and the type specimen of *Emberiza shah* in the Paris Museum was likewise considered by him to be identical with ordinary *E. hortulana*. Eastern specimens, however, are always of a clearer and brighter colour than the western ones, but I do not think there is sufficient difference on which to found a subspecific distinction.

87. *EMBERIZA BUCHANANI*.

*Emberiza huttoni*, Jerd.; Blanf. East. Persia, ii. p. 258 (1876); Scully, Ibis, 1881, p. 575; C. Swinh. Ibis, 1882, p. 113; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 90; Severtz. Ibis, 1883, p. 61.

*Emberiza buchanani*, Blyth; Bidd. Ibis, 1881, p. 80; Sharpe, Cat. B. Brit. Mus. xii. p. 533 (1888); id. Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 81 (1889).

Nos. 846, 847, 848. North of Sháhídúla, October 21, 1873.

No. 1674. South-west of Ighiz Yar, May 18, 1874.

88. *EMBERIZA CIA*.

*Emberiza cia*, L.; Severtz. Turkest. Jevotn. p. 64 (1873); Dresser, Ibis, 1875, p. 247; Blanf. East. Persia, ii. p. 257 (1876); Sharpe, Cat. B. Brit. Mus. xii. p. 537 (1888).

Nos. 1411, 1412, ♂ ♀. Akdarra [Aktala], March 22, 1874.

The birds appear to be the true *E. cia* and not the Himalayan race *E. stracheyi*.

Dr. Stoliczka notices this Bunting in his 'Diary' on the above date. He says:—"I shot a male and female of what appears to be *Emberiza cia*, apparently a new-comer to the country."

No. 1504, ♂. Panjah, April 14-23, 1874.

Colonel Biddulph says that, to the best of his knowledge, this species was not seen anywhere in Yarkand. He procured specimens in Wakhán in April.

89. *EMBERIZA STRACHEYI*.

*Emberiza stracheyi*, Moore; Wardlaw Ramsay, Ibis, 1880, p. 65; Bidd. Ibis, 1881, p. 79; Scully, t. c. p. 574; Sharpe, Cat. B. Brit. Mus. xii. p. 539 (1888).

*Emberiza cia* (nec L.); Hume & Henders. Lahore to Yark. p. 256 (1873).

No. 50, ♂. Murree, June 26, 1873.

No. 62. Murree, June 29, 1873.

No. 278, ♂. Gond, August 8, 1873.

Nos. 286, 289, ♂ ♀. Gaganghir, August 9, 1873.—Length 4·8 inches, wing 2·6, tail 1·9; bill from front 0·35, from gape 0·56; tarsus 0·7. Iris dark brown; bill brown, yellow below; feet leaden grey; inside of mouth yellow.

No. 315, ♀. Sonámarg, August 10, 1873.

Nos. 371, 374. Baltal, August 12, 1873.

No. 480. Shargol, August 20, 1873.

This Bunting, according to Dr. Henderson, was common all through Kashmir from above Jamu to near the Zoji-lá Pass; beyond this it was not met with.

90. *EMBERIZA GODLEWSKII*.

*Emberiza godlewskii*, Tacz.; Prjev. in Rowley's Orn. Misc. ii. p. 308 (1877); Sharpe, Cat. B. Brit. Mus. xii. p. 542 (1888).

No. 1413. Akdarra [Aktala], March 22, 1874.

On the 24th of March Colonel Biddulph shot a couple of male birds, one adult and one immature, in the Kirog Valley. These two specimens he gave to Mr. Mandelli, and they passed with the rest of the Mandelli Collection into Mr. Hume's hands, and they are now in the British Museum (*cf.* Sharpe, *l. c.*).

91. *EMBERIZA STEWARTI*.

*Emberiza stewarti*, Blyth; Dresser, Ibis, 1875, p. 248; Wardlaw Ramsay, Ibis, 1879, p. 446, 1880, p. 65; Bidd. Ibis, 1881, p. 81; Scully, t. c. p. 575; C. Swinh. Ibis, 1882, p. 113; Bidd. *ibid.* p. 282; Sharpe, Cat. B. Brit. Mus. xii. p. 547 (1888).

*Emberiza caniceps*, Gould; Severtz. Turkest. Jevotn. p. 64 (1873).

No. 77. Murree, July 2, 1873.

No. 83. Changligally, near Murree, July 2, 1873.

No. 121. Chuttrebelas, July 16, 1873.

No. 189, ♀. Srinagar, July 28, 1873.

92. *EMBERIZA LEUCOCEPHALA*.

*Emberiza leucocephala*, Gm.; Hume & Henderson, Lahore to Yark. p. 254 (1873); Dresser, Ibis, 1875, p. 248; Finsch, Verh. z.-b. Ges. Wien, xxix. p. 215 (1879); Bidd. Ibis, 1881, p. 79; Scully, t. c. p. 574; C. Swinh. Ibis, 1882, p. 113; Bidd. *ibid.* p. 282; Severtz. Ibis, 1883, p. 60; Sharpe, Cat. B. Brit. Mus. xii. p. 549 (1888); *id.* Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 81 (1889).

*Emberiza pityornis*, Pall.; Severtz. Turkest. Jevotn. p. 64 (1873); Prjev. in Rowley's Orn. Misc. ii. p. 307 (1877); Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 90.

No. 888. Sanju, October 27, 1873. [An adult male in winter plumage.]

No. 1477. Panjah, April 16, 1874.—Length 7·3 inches, wing 3·6, tail 3·0, tarsus 0·4; bill from front 0·4, from gape 0·5. Iris brown; bill dusky, lower mandible pale bluish; feet fleshy brown, soles yellowish.

This species was met with by Dr. Henderson in October in large flocks near Sonámarg in the Sind Valley. They had probably been driven down from the pine-forests above by a fall of snow which had occurred a few days previously.

Genus **MELOPHUS**.

93. *MELOPHUS MELANICTERUS*.

*Melophus melanicterus* (Gm.); Sharpe, Cat. B. Brit. Mus. xii. p. 568 (1888).

♂ ad. No locality.

No. 122, ♂ ad. Chuttrebelas, July 16, 1873.



## Family ALAUDIDÆ.

Genus **OTOCORYS**.94. *OTOCORYS PALLIDA*.

*Otocorys penicillata* (nec Gould) ; Severtz. J. f. O. 1875, p. 191 ; Scally, Str. F. iv. p. 174 (1876); Dresser, Ibis, 1876, p. 181 ; Severtz. Ibis, 1883, p. 61.

*Otocorys pallida*, Sharpe, Cat. B. Brit. Mus. xiii. p. 533 (1890).

Nos. 938, 939, ♂ ad. Sanju, October 31.—Wing 4·7–4·85 inches.

No. 892, [ ♀ ] ad. Sanju, October 28.—Length 7·65 inches, wing 4·4, tail 3·05, tarsus 0·9. Bill bluish horny, blackish towards the tip, pale below ; iris brown.

All three in full winter plumage, in which stage it is extremely difficult to tell some of the specimens from *O. albigula*, because the black feathers on the sides of the face and chest-band are rather broadly edged with white, and then the accumulation of these white edges, in a carelessly prepared skin, gives a pale appearance between the ear-coverts and the chest-band which may render the skins easily mistaken for *O. brandti*.

No. 945, ♀ ad. Sanju, November 1.—Wing 4·35 inches.

No. 927, ♀ ad. Khushtágh, November 2.—Wing 4·4 inches.

No. 940, ♀ ad. Oi-tográk, November 3.—Wing 4·2 inches.

All the above females have the throat-patch obscured by ashy-whitish margins.

No. 952, ♂ ad. Bora, November 4.—Wing 4·6 inches.

Has a slight tinge of yellow on the forehead. The pale margins have almost vanished from the throat-patch, but are a little more distinct on the ear-coverts ; the black band across the hinder crown is becoming pronounced.

No. 967, ♂ ad. Kárghalik, November 6.—Wing 4·65 inches.

Very similar to the foregoing specimen, but the frontal band is not so distinct.

No. 991, ♀. Yarkand, November 10.—Wing 4·5 inches.

No. 1046, ♂. Yarkand, November 23.—Wing 4·2 inches.

The male does not show much advance on the specimens killed earlier in the month, but there are certain signs of disappearance of the winter plumage in the development of black on the frontal band and ear-tufts ; there is also a slight strengthening of the line at the base of the forehead, which, however, is never absent in winter-plumaged males, but is scarcely visible in the females.

No. 1115, ♂. Yangihissár, December 2.—Wing 4·85 inches.

Nos. 1132, 1136, 1149, 1152, ♂. Kashghar, December 11–16.—Wing 4·6–4·75 inches.

No. 1252, ♂. Marálbáshi, January.—Wing 4·7 inches.

In all the above specimens there is a slight indication of approaching nuptial plumage.

No. 1305, ♂. Kashghar, February 4.—Wing 4·8 inches.

The black on the crown, sides of face, and throat is so strongly developed that there is scarcely any indication of light edgings left.

No. 1440, ♀. Tashkúrghán, March 30.—Wing 4·4 inches.

This is rather a curious bird, for, although it was shot in the spring, and by the black

streaking of its head shows decided approach to nuptial dress, yet the forehead, sides of face, and throat are decidedly tinged with yellow, as in autumn.

Nos. 1502, 1508, 1509, ♂. Panjah, April 14–23.—Wing 4·65–4·8 inches.

No. 1503, ♀ ad. Wing 4·4 inches.

In spring plumage without a trace of the winter markings, all of which have disappeared by the shedding of the edges to the feathers. I must confess that in full plumage the pale race of Horned Lark approaches more nearly to *O. penicillata*, but it never quite loses the ochraceous tint which is the distinguishing character of the race.

Dr. Stoliczka's 'Diary' states that this species was not uncommon near Oi-tográk on the 3rd of November. Near Yangihissár it was very common early in December. At Tashkúrhán he notes:—" *Otocoris* comes up here, I suppose to breed."

Dr. Scully procured specimens in the desert between Sulik Aziz Langar and Sanju, in August, at the foot of the hills, and in the mountains it was observed in some most desolate places, even at elevations of about 17,000 feet. He states that it was common in Eastern Turkestan in winter, frequenting the open bare steppes. "When riding out of Kashghar, on the journey to Yarkand, for instance, *Galerita magna* would at first be very numerous about habitations, &c.; then on the borders of cultivation *G. magna* and the present species would be found together, overlapping as it were; while a little further on, on the stony steppe, *G. magna* would cease and be replaced entirely by *Otocorys*. At the approach of summer the species under consideration quits the plains for the surrounding hills, whither it repairs to breed. The Turki name is 'Kara Kash Toghái,' i. e. 'Black-browed Lark.' It is also sometimes called 'Sai Toghái,' = 'Steppe Lark.'"

#### 95. OTOCORYS ELWESI.

*Otocorys elwesi*, Blanford, J. A. S. Beng. xli. p. 62 (1872); Severtz. Ibis, 1883, p. 61; Sharpe, Cat. B. Brit. Mus. xiii. p. 534 (1890); Oates, Faun. Brit. Ind., Birds, ii. p. 321 (1890).

*Otocorys longirostris* (nec Moore); Hume & Henders. Lahore to Yark. p. 267 (1873); Dresser, Ibis, 1876, p. 181.

No. 650, ♀ ad. North of Leh, September 8, 1873.—Culmen 0·55 inch, wing (moulting) 4·1.

No. 776, ♂ ad. Chagra, September 21, 1873.—Culmen 0·55 inch, wing 4·65.

No. 810, ♂ ad. North of Suget Pass, October 16, 1873.—Wing 4·6 inches.

No. 940, ♂ ad. Kárghalik, November 6, 1873.—Culmen 0·6 inch, wing 4·3.

♂ ad. Aktágh, June 14, 1874.—Culmen 0·55 inch, wing 4·45. Iris hazel; bill bluish black, albescent at base of lower mandible; feet fleshy-brownish black, the soles albescent.

♀ ad. Aktágh, June 14, 1874.—Culmen 0·5–0·55 inch, wing 4·3. Iris dark hazel; bill bluish dusky, paler at base of lower mandible; feet fleshy dark brown, the tarsi paler behind, soles albescent.

In Dr. Stoliczka's 'Diary' occurs the following note:—"Wahábjilga, June 14, 1874. I shot several specimens of an *Otocorys* which is as small as *O. penicillata*, but has the black divided at the sides of the throat like *O. longirostris*. Is this not *O. elwesi* of Blanford? I have not seen it north of Aktágh. It is evidently the same which Biddulph shot last year at Kizil Jilga. I am not sure whether it is not a permanent inhabitant of the hills, while

*O. longirostris* is found on the Himalayas of the Indus Valley and very likely goes to the plains in part during the winter."

In the Hume Collection are a number of specimens from the Central-Asian Expeditions, with the following localities:—Tanksi (*Henderson*), Pangong Lake (*Henderson*), Aktágh (*Biddulph*), Karakash Valley (*Henderson*). Dr. Henderson procured both this species and the long-billed form at Tanksi.

#### 96. OTOCORYS LONGIROSTRIS.

*Otocorys longirostris*, Moore, P. Z. S. 1855, p. 215, pl. 3 (*ex* Gould MSS.); Scully, Ibis, 1881, p. 581; Biddulph, Ibis, 1882, p. 285; Dresser, Ibis, 1884, p. 116; Sharpe, Cat. B. Brit. Mus. xiii. p. 536 (1890); Oates, Faun. Brit. Ind., Birds, ii. p. 320 (1890).

No. 501, ♂ ad. Above Kharbu, 14,000 feet, August 22, 1873.—Culmen 0·7 inch, wing 4·85. Iris chocolate-brown; bill dusky horny; feet dark horny brown, slightly bluish on the tarsi, soles albescent.

No. 502, ♀ ad. Above Kharbu, 14,000 feet, August 22, 1873.—Culmen 0·65 inch, wing 4·65.

These measurements scarcely exceed those of *O. elwesi*, but some allowance has to be made for the worn condition of the specimen, which is in full breeding-plumage. (*Cf.* Stoliczka's note, *infra*.)

Nos. 508, 509, 510, nestlings. Kharbu, August 22, 1873.

No. 697, ♂ ad. Tsúltak, North of Changla, 15,500 feet, September 15, 1873.

No. 758, ♂ ad. Lukung, September 20, 1873.—Culmen 0·65 inch, wing 5·1.

No. 774, ♂ ad. Chagra, September 21, 1873.—Culmen 0·7 inch, wing 5.

In Dr. Stoliczka's 'Diary' he writes:—"Kharbu, August 22, 1873. I shot a male and female and three young of *O. longirostris* at about 15,000 to 16,000 feet high." He also saw a great number of this species at Rimdi on the 22nd of September.

Specimens from the Pangong Lake and Tanksi are in the Hume Collection. They were collected by Dr. Henderson, who states that this Horned Lark was met with from the first pass above Leh until the Expedition left the Karakash Valley going to Yarkand. It was usually found near water at from 12,000 to about 15,000 feet. It is not quite certain to me that Dr. Henderson recognized the differences between the Horned Larks, as his specimens from the Karakash Valley were *O. elwesi*.

#### 97. OTOCORYS BRANDTI.

*Otocorys brandti*, Dresser, B. Eur. iv. p. 402 (1874); id. Ibis, 1876, p. 181; Sharpe, Cat. B. Brit. Mus. xiii. p. 536 (1890).

*Otocorys parvexi*, Tacz. Bull. Soc. Zool. France, i. p. 161 (1876).

*Otocorys petrophila*, Severtz. J. f. O. 1873, p. 379.

*Alauda brandti*, Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 90.

No. 1203, ♀ ad. Kashghar, January 15, 1874.—Culmen 0·5 inch, wing 4·3.

No. 1211, ♀ ad. Kashghar, January 19, 1874.—Culmen 0·55 inch, wing 4·15.

No. 1299, ♀ ad. Kashghar, February 3, 1874.—Culmen 0·5 inch, wing 4·25.

No. 1501, ♀ ad. Panjah, April 14-23, 1874.—Culmen 0·5 inch, wing 4·1.

A female of this Horned Lark was procured by Dr. Henderson on the Khoosh Maidan in Yarkand in September.

Genus **MELANOCORYPHA.**98. **MELANOCORYPHA BIMACULATA.**

*Melanocorypha bimaculata* (Ménétr.) ; Severtz. Turkest. Jevotn. pp. 67, 143 (1873) ; Blanf. East. Persia, ii. p. 244 (1876) ; Dresser, Ibis, 1876, p. 183 ; Bidd. Ibis, 1881, p. 89 ; Scully, t. c. p. 580 ; C. Swinh. Ibis, 1882, p. 115 ; Scully, J. A. S. Beng. lvi. p. 84 (1887) ; Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 82 (1889) ; id. Cat. B. Brit. Mus. xiii. p. 555 (1890) ; Oates, Faun. Brit. Ind., Birds, ii. p. 323 (1890).

*Melanocorypha torquata*, Blyth ; Hume & Henders. Lahore to Yark. p. 265, pl. xxvii. (1873) ; Scully, Str. F. iv. p. 173 (1876).

*Melanocorypha bimaculata*,  $\beta$ . *minor*, Severtz. Turkest. Jevotn. p. 67 (1873) ; Dresser, Ibis, 1876, p. 183.

No. 1013, ♂. Yarkand, November 12, 1873.—Length 7·7 inches, wing 4·8, tail 2·4, tarsus 1·05 ; expanse 15·2 ; bill from front 0·73, from gape 0·85 ; length of foot 1·85 ; wings reach within 0·5 of end of tail. Iris brown ; bill bluish horny above and on the basal half of lower mandible, yellow at the sides and tip.

No. 1292. Kashghar, February 1, 1874.—Length 7 inches, wing 4·43, tail 2·15, tarsus 1·1 ; expanse 13·9 ; bill from front 0·62, from gape 0·75 ; length of foot 1·8. Iris dark brown ; bill dusky, pale below, yellowish at the base ; feet fleshy white ; claws dusky.

No. 1293. Kashghar, February 1, 1874.—Length 7·6 inches, wing 4·83, tail 2·35, tarsus 1·13 ; expanse 14·7 ; bill from front 0·65, from gape 0·8 ; length of foot 1·92 ; hind toe with claw 0·83, claw alone 0·45 ; middle toe from the root 0·94, greatest breadth 1·37 ; height of bill 0·32 ; wings reach within 0·4 of end of tail. Iris dark brown ; bill dusky, pale below, yellowish at base ; feet fleshy white.

Dr. Henderson procured a specimen of this species on the return journey, at the foot of the hills leading from Kashmir to the plains of the Punjab. Dr. Scully writes :—“ Three specimens of this bird were obtained in Yarkand in February, but it was not seen after that, except some cage-birds. It is said to be very plentiful in the neighbourhood of Ili (Kulja), and only to visit Kashghar and Yarkand in January and February. The species is a very favourite cage-bird with the Kashgharians, on account of its sweet song. A specimen was brought to me in June, which sang most beautifully, and the owner wanted twenty tangas (Rs. 4) for it. The Turki name is *Ili Toghai*, i. e. the ‘ Ili Lark.’ ”

Genus **ALAUDA.**99. **ALAUDA CANTARELLA.**

*Alauda arvensis*, L. ; Severtz. Turkest. Jevotn. p. 67 (1873) ; Blanf. East. Persia, ii. p. 239 (1876) ; Prjev. in Rowley's Orn. Misc. ii. p. 314 (1877) ; Finsch, Verh. z.-b. Ges. Wien, xxix. p. 221 (1879) ; Bidd. Ibis, 1881, p. 89 ; C. Swinh. Ibis, 1882, p. 116 ; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 90 ; Radde, Ornith., iii. p. 484 (1887) ; St. John, Ibis, 1889, p. 173 ; Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 81 (1889) ; id. Cat. B. Brit. Mus. xiii. p. 567 (1890) ; Oates, Faun. Brit. Ind., Birds, ii. p. 324 (1890).

*Alauda cantarella*, Bp. Iconogr. Faun. Ital. Ucc. p. 5 (1841).

*Alauda dulcivox*, Hodgs. ; Bidd. Ibis, 1881, p. 89 ; Scully, t. c. p. 582.

*Alauda triborhyncha* (nec Hodgs.), Hume & Henders. Lahore to Yark. p. 268, pl. xxviii. (1873).

- No. 1197. Artish, north of Kashghar, January 11, 1874.  
 No. 1238. Marálbáshi, January 1874.  
 Nos. 1263, 1302, 1311, 1312, 1326, 1348, 1370. Kashghar, January 24 to February 11, 1874.  
 No. 1407. Ighiz Yar, March 22, 1874.  
 No. 1454. Pámirkul, April 5, 1874.  
 No. 1546. Panjah, April 24, 1874.—Bill bluish dusky above, pale whitish below; feet fleshy brown; tarsi paler; claws horny brown; iris dark brown. Length 7 inches, wing 4, tail 2·6, tarsus 0·9.  
 Nos. 1552, 1554. Panjah, April 25, 1874.

Dr. Stoliczka notes that on the 12th of January *A. dulcivox* seemed to be common near Kashghar, but it was said not to remain there during the summer. Colonel Biddulph procured specimens near Kashghar in February.

#### 100. ALAUDA LIOPUS.

- Alauda liopus*, Hodgs. in Gray's Zool. Misc. p. 84 (1844); Sharpe, Cat. B. Brit. Mus. xiii. p. 574, sub *A. arvensis* (1890).  
*Alauda gulgula* (nec Frankl.), Hume & Henders. Lahore to Yark. p. 269 (1873, nec pl. xxix.).  
*Alauda guttata*, Brooks; Bidd. Ibis, 1881, p. 90; Scully, t. c. p. 583; id. J. A. S. Beng. lvi. p. 84 (1887).

- Nos. 161, 162. Sopur, July 26, 1873.  
 No. 213. Srinagar, July 30, 1873.  
 No. 301. Sonámarg, August 10, 1873.—Bill horny; feet brownish fleshy; tarsi fleshy; iris brown. Length 6·75 inches, wing 4·1, tail 2·65, tarsus 0·95.  
 Nos. 318, 337, 341, 360. Sonámarg, August 10–12, 1873.  
 No. 423, juv. Dras, August 16, 1873.  
 Nos. 601, 621. Leh, August 31, 1873.  
 No. 708. Tanksi, September 16, 1873.

Dr. Henderson obtained a specimen of this Lark in May near Srinagar, and Colonel Biddulph met with it in the Nubra valley on the 25th of June, and again at Leh on the 5th of September. Several references to the species occur in Dr. Stoliczka's 'Diary,' but none are of any importance. He says that it was common near Tanksi in September.

#### Genus **CALANDRELLA.**

#### 101. CALANDRELLA TIBETANA.

- Calandrella tibetana*, Brooks, Str. F. viii. p. 488 (1880); Sharpe, Cat. B. Brit. Mus. xiii. p. 585 (1890); Oates, Faun. Brit. Ind., Birds, ii. p. 329 (1890).

A specimen of this short-toed Lark from Cashmere, collected by Dr. Henderson, is in the Hume Collection. Colonel Biddulph obtained a specimen in the Indus Valley on the 24th of June. He also procured one at Chassi Yassin in August.



## 102. CALANDRELLA ACUTIROSTRIS.

*Calandrella brachydactyla* (nec Leisl.), Hume & Henders. Lahore to Yark. p. 264 (1873); Scully, Str. F. iv. p. 172 (1876); Wardlaw Ramsay, Ibis, 1880, p. 67.

*Calandrella acutirostris*, Hume, in Lahore to Yark. p. 265 (1873); Sharpe, Cat. B. Brit. Mus. xiii. p. 585 (1890); Oates, Faun. Brit. Ind., Birds, ii. p. 327 (1890).

No. 428. Tashgam, August 17, 1873.

Nos. 539, 566, 593, 598, 600. Leh, August 27-31, 1873.

No. 587. Leh, August 30, 1873.—Bill dark horny along the ridge, yellowish at the sides; feet pale dusky horny; tarsi fleshy brownish; iris brown. Length 6·6 inches, wing 3·82, tail 2·75, tarsus 0·8.

Nos. 623, 629. Leh, September 4, 1873.

No. 649. Leh, September 8, 1873.—Bill dusky horny along the ridge and on tip, the rest fleshy brown; feet dusky; tarsi fleshy brown; iris brown.

No. 745. Lukung, September 19, 1873.

No. 829. Nubra Valley, October (*Dr. Bellew*).

No. 907. Sanju, October 28, 1873.

No. 1470. Panjah, April 16, 1874.—Iris dark brown; bill livid, pale dusky horny along the culmen; feet dusky white; soles fleshy white. Length 6·1 inches, wing 3·5, tail 2·2, tarsus 0·83.

No. 1604. Sarikol, May 9, 1874.

“Eggs very small yet.”

No. 1605. Sarikol, May 9, 1874. Bill dusky brown, pale yellowish at base; feet light brown; iris dark brown. Length 6·7 inches, wing 3·8, tail 2·65, tarsus 0·77.

Dr. Stoliczka states that this Lark was common near Lukung in September. Birds in breeding-plumage were got at Sarikol on the 9th of May, and in Dr. Stoliczka's opinion would have laid in about a fortnight.

Dr. Henderson did not distinguish between this species and *C. tibetana*, but his specimens show to which Lark the following note is to be referred:—“Several specimens of this species were obtained in Kashmir and Ladák, in both of which localities it may prove to breed, and numerous nestlings were procured near Balakchi and along the Karakash between the 31st of July and the 5th of August.” Dr. Scully obtained the species in the same district, and he writes:—“It was only observed at Balakchi, and for a short distance along the Karakash River (elevation 12,000 feet), where it had evidently been breeding. The birds were numerous on the alluvial plains between Sháhídúla and Balakchi, and they ran about swiftly among the stones, flying off in flocks when alarmed. They uttered a short twittering note, and their flight was wavy, somewhat resembling that of a Wagtail.”

Genus **ALAUDULA.**

## 103. ALAUDULA SEEBOHMI.

*Alaudula pispoletta* (nec Pall.), Scully, Str. F. iv. p. 173 (1876).

? *Alaudula pispoletta*, Bidd. Ibis, 1881, p. 89.

*Alaudula seebohmi*, Sharpe, Cat. B. Brit. Mus. xiii. p. 590 (1890).

- No. 947, ♂. Kárghalik, November 5, 1873.—Bill dusky bluish pale; feet fleshy; iris brown. Length 6·75 inches, wing 4·05, tail 2·93, tarsus 0·8.  
 Nos. 1045, 1051, 1054, 1055, 1057. Yarkand, November 24, 1873.  
 Nos. 1131, 1139, 1140, 1145, 1153, 1154, 1166. Kashghar, December 10–19, 1873.  
 No. 1213. Kashghar, January 20, 1874.—Bill pale greenish; feet light dusky brown; iris dark hazel. Length 6·5 inches, wing 3·75, tail 2·75, tarsus 0·8.  
 Nos. 1324, 1325. Kashghar, February 9, 1874.  
 No. 1835. Kugiár, June 1, 1874.

Colonel Biddulph procured specimens at Yangihissár on the 2nd of December, and at Kashghar in January. He states that the species was very common in the plains of Yarkand, during the winter at any rate. Dr. Scully writes:—"This species is a permanent resident in the plains of Kashgharia, where it breeds. It is much less common than *Galerita magna*, and is rather shy. It is usually found at some distance from habitations, frequenting waste sandy tracts and ground covered with efflorescence. It is a very whitish, desert-looking sort of bird, and a sweet songster, rising high in the air, and remaining fixed in one spot while it utters its note. In June, when it breeds, it is usually noticed about in pairs. The Turki name for this species is *Chulan toghai*, the word *Toghai* meaning 'Lark.'"

The Rev. Dr. Lansdell has more recently obtained the present species near Aksu. Dr. Henderson also got an immature specimen on the Karakash River.

#### Genus **GALERITA**.

##### 104. *GALERITA MAGNA*.

*Galerita magna*, Hume, Ibis, 1871, p. 407; id. & Henders. Lahore to Yark. p. 270, pl. xxx. (1873); Severtz. Str. F. iii. p. 424 (1875); Scully, Str. F. iv. p. 175 (1876); Menzbier, Ibis, 1885, p. 354; Sharpe, Cat. B. Brit. Mus. xiii. p. 632, sub *G. cristata* (1890); Oates, Faun. Brit. Ind., Birds, ii. p. 337 (1890).

No. 889. Sanju, October 27, 1873.

No. 893, ♂. Sanju, October 28, 1873.—Length 8 inches, wing 4·53, tail 2·85, tarsus 1; expanse 14·4; bill from front 0·68, from gape 0·9; length of foot 1·6. Iris brown; bill greenish horny, pale below; feet whitish, with a greenish horny tinge.

No. 894, ♀. Sanju, October 28, 1873.—Length 7·65 inches, wing 4·2, tail 2·6, tarsus 0·95; expanse 13; bill from gape 0·82; length of foot 1·72. Iris brown; bill yellowish pale brown, pale below; feet whitish, with a slight greenish horny tinge.

Nos. 895, 896, 897, 898, 901, 902, 906, 909. Sanju, October 28, 1873.

No. 923. Sanju, October 29, 1873.

No. 993. Yarkand, November 10, 1873.

Nos. 1104, 1112. Yangihissár, December 2, 1873.

Nos. 1236, 1239. Marálbáshi, January 1874.

Nos. 1301, 1303. Kashghar, February 3, 1874.

No. 1373. Jigda, February 21, 1874.

No. 1738. Yarkand, May 15–20, 1874.

In the 'Catalogue of Birds' (vol. xiii. p. 626), I have shown that it is impossible to draw a line of distinction between the Crested Lark of Europe and the large pale race of Central Asia,

which Hume called *G. magna*. From the localities visited by the Expedition, all the specimens are easily recognizable as *G. magna*, and it is better to keep them under Mr. Hume's name.

Dr. Stoliczka mentions in his 'Diary' that *G. magna* was one of the most common birds in the fields near Yarkand in November. Colonel Biddulph says that it was very common in the plains all through the winter, and was breeding there in May.

Dr. Scully writes:—"This species is one of the commonest birds in the plains of Kashgharia, where it is a permanent resident. It is a very tame bird and frequents fields, roadways, and the vicinity of habitations generally. It is occasionally caged on account of its rather sweet song. This Lark breeds in May and June, making its nest on the ground in cultivated fields or in low grass. The Turki name for this bird is 'Kapak toghai,' sometimes called 'Popochek toghai,' *i. e.* 'Crested Lark.'"

The Rev. Dr. Lansdell, during his last journey through Central Asia, obtained specimens at Chadir Kul and Charwagh in August, and at Guma in September.

### Family MOTACILLIDÆ.

#### Genus **MOTACILLA**.

#### 105. MOTACILLA ALBA.

*Motacilla alba*, L.; Severtz. Turkest. Jevotn. p. 66 (1873); Dresser, Ibis, 1876, p. 176; Scully, Str. F. iv. p. 151 (1876); Blanf. East. Persia, iii. p. 232 (1876); Bidd. Ibis, 1881, p. 68; Scully, ibid. p. 451; C. Swinh. Ibis, 1882, p. 109; Bidd. ibid. p. 280; Severtz. Ibis, 1883, p. 80; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 85; Sharpe, Cat. B. Brit. Mus. x. p. 465 (1885); Scully, J. A. S. Beng. lvi. p. 85 (1887); Radde, Ornith., iii. p. 486 (1887); Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 78 (1889); Oates, Faun. Brit. Ind., Birds, ii. p. 287 (1890).

*Motacilla dukhunensis*, Prjev. in Rowley's Orn. Misc. ii. p. 192 (1877).

Nos. 818, 822, 823. Sháhídúla, October 19, 1873.

No. 1541, ♂ ad. Panjah, April 24, 1874.—Bill black; feet black; iris dark brown. Length 8·2 inches, wing 3·8, tail 3·8, tarsus 0·92.

Dr. Scully shot a single specimen at Sanju on first entering Eastern Turkestan. The Turki name for this Wagtail is "Sunduk," and it is said to disappear entirely from Eastern Turkestan in winter.

#### 106. MOTACILLA PERSONATA.

*Motacilla personata*, Gould; Severtz. Turkest. Jevotn. pp. 66, 139 (1873); Hume & Henders. Lahore to Yark. p. 224 (1873); Dresser, Ibis, 1876, p. 177; Scully, Str. F. iv. p. 150 (1876); Finsch, Verh. z.-b. Ges. Wien, xxix. p. 172 (1879); Wardlaw Ramsay, Ibis, 1880, p. 160; Bidd. Ibis, 1881, p. 68; Scully, ibid. p. 451; C. Swinh. Ibis, 1882, p. 109; Severtz. Ibis, 1883, p. 64; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 86; Sharpe, Cat. B. Brit. Mus. x. p. 479 (1885); id. Trans. Linn. Soc. (2) Zool. v. p. 78 (1889).

No. 166, ad. Sopur, July 26, 1873.

No. 277, young. Gond, August 8, 1873.

No. 314, ad. Sonámarg, August 12, 1873.

No. 431, juv. Tashgam, August 17, 1873.

No. 482, moulting. Shargol, Ladák, August 20, 1873.

No. 646, ad. Leh, September 7, 1873.

- No. 655, ad. Leh, September 9, 1873.  
 No. 676, ad. Tikzag, September 12, 1873.  
 No. 696, ad. Tsúltak, N. of Changla, September 15, 1873.  
 No. 814, young. Sháhídúla, October 19, 1873.  
 No. 1019, ad. Yarkand, November 13, 1873.  
 No. 1158, ad. Kashghar, December 17, 1873.—Length 8·4 inches, wing 3·8, tail 3·9, tarsus 0·95; expanse 11·7; bill from front 0·5, from gape 0·73; length of foot 1·32. Iris blackish; bill black, paler at lower base; feet black.  
 No. 1274, ad. Kashghar, January 25, 1874.  
 No. 1499, ad. Panjah, April 14–23, 1874.  
 No. not given. Sarikol, May 9, 1874.—Length 7·6 inches, wing 3·56, tail 3·4, tarsus 0·92; expanse 11·5; bill from front 0·45, from gape 0·7; length of foot 1·2; spread of foot 0·95. Iris dark brown; bill black; feet black, soles dusky.  
 No. 1700. Yarkand, May 20, 1874.  
 No. 1796. Yarkand, May 27, 1874.  
 No. 1808. Kárgchalik, May 29, 1874.

Dr. Stoliczka says that *M. personata* was moderately common near Sonámarg. He also states that it was not uncommon about Kashghar in December, and again near Panjah in April.

Dr. Henderson obtained the species at Oi-tográk in the plains of Yarkand, and others, as well as nestling birds, in August, along the Arpalák River. Generally, wherever there was water throughout Yarkand, similar Wagtails were observed.

“This species,” says Dr. Scully, “is the common Wagtail of Eastern Turkestan, where it is found in great numbers throughout the plains, generally near habitations and streams of running water. It is most numerous from March to September, but some of these birds are certainly to be seen throughout the year. This Wagtail breeds in May, and is called in Turki ‘Kok Sunduk,’ *i. e.* ‘Blue Wagtail.’”

On the 27th of May Dr. Stoliczka got the nest near Yarkand. “It breeds on the ground near the edge of the water. The nest is about 1·25 inches deep and about 2·5 inches in diameter, constructed of moss and grass, with a very thick lining of horse-hair inside. Eggs six, greenish white, dotted all over with dull inky brown. Out of the six eggs two were fresh and two were bad, and two contained live, almost fully-developed young. I saw a few other nests; they had from four to six young birds, just hatched.”

#### 107. MOTACILLA HODGSONI.

*Motacilla luzoniensis* (nec Scop.) ; Hume & Henders. Lahore to Yark. p. 223 (1873).

*Motacilla personata*, var. *melanonota*, Severtz. Turkest. Jevotn. pp. 67, 139 (1873).

*Motacilla japonica* (nec Swinh.) ; Dresser, Ibis, 1875, p. 177.

*Motacilla hodgsoni*, Blyth; Bidd. Ibis, 1881, p. 67; Scully, t. c. p. 451; Sharpe, Cat. B. Brit. Mus. x. p. 486 (1885); Oates, Faun. Brit. Ind., Birds, ii. p. 291 (1890).

- No. 221. Srinagar, July 31, 1873.—Length 7·2 inches, wing 3·5, tail 3·1, tarsus 0·95; expanse 10·5; bill from front 0·5, from gape 0·75. Iris brown; bill black; feet black.  
 No. 260. Srinagar, August 5, 1873.

- No. 306. Sonámarg, August 10, 1873.  
 No. 448. Chiliscambo, August 18, 1873.  
 No. 461. Kargil, August 19, 1873.

## 108. MOTACILLA CAMPESTRIS.

- Motacilla campestris*, Pall. ; Sharpe, Cat. B. Brit. Mus. x. p. 510 (1885).  
*Budytes rayi*, var. *flavifrons*, Severtz. Turkest. Jevotn. p. 67 (1873).  
*Budytes flavifrons*, Severtz. Str. F. iii. p. 424 (1875).  
*Motacilla rayi*, Dresser, Ibis, 1876, p. 178.  
*Budytes rayi*, C. Swinh. Ibis, 1882, p. 109 ; Radde, Ornith., iii. p. 485.

- No. not given. Sarikol, May 9, 1874.—Length 7 inches, wing 3·25, tail 2·8, tarsus 0·95 ;  
 expanse 10·1 ; bill from front 0·5, from gape 0·68 ; length of foot 1·53, spread 1·1 ;  
 middle toe 0·8, hind toe 0·65, hind claw 0·33 ; wings reach within 1·8 of end of tail.  
 Iris brown ; bill black ; feet black, sole dull yellowish.  
 No. 1646. Sarikol, May 10, 1874.

## 109. MOTACILLA BEEMA.

- Motacilla beema*, Sykes ; Sharpe, Cat. B. Brit. Mus. x. p. 521, pl. vi. fig. 6 (1885) ; id. Trans. Linn. Soc.  
 (2) Zool. v. p. 78 (1889) ; Oates, Faun. Brit. Ind., Birds, ii. p. 296 (1890).  
*Budytes flava* (nec L.) ; C. Swinh. Ibis, 1882, p. 110.

- No. 1557, ♂. Panjah, April 25, 1874.—Length 6·8 inches, wing 3·2, tail 2·8, tarsus 0·9 ;  
 expanse 9·8 ; bill from front 0·46, from gape 0·7 ; length of foot 1·4, spread 1·05 ;  
 middle toe 0·75, hind toe 0·68, hind claw 0·33 ; height of bill at the nostrils 0·13, its  
 width the same. Iris hazel-brown ; bill dusky black, paler below at base ; feet  
 brownish black, soles whitish cinereous. Wings reach within 1·8 inch of end of tail.  
 No. 1556, ♀. Panjah, April 25, 1874.—Length 6·6 inches, wing 3·05, tail 2·7, tarsus 1 ;  
 expanse 9·8 ; bill from front 0·48, from gape 0·7 ; length of foot 1·5, spread of  
 foot 1·1 ; middle toe 0·8, hind toe 0·7, hind claw 0·33 ; height of bill at the nostrils  
 0·15 ; wings reach within 1·75 of end of tail. Iris hazel ; bill black ; feet black.

Colonel Biddulph records this species as common in Wakhán in April. Dr. Stoliczka  
 says that it evidently breeds near Panjah.

## 110. MOTACILLA FELDEGGII.

- Motacilla melanocephala* (nec Gm.) ; Dresser, Ibis, 1876, p. 178.  
*Budytes melanocephalus*, Severtz. Turkest. Jevotn. p. 67 (1873) ; Blanf. East. Persia, ii. p. 235 (1876) ;  
 Bidd. Ibis, 1881, p. 69 ; C. Swinh. Ibis, 1882, p. 109 ; Severtz. Ibis, 1883, p. 80 ; Scully, J. A. S.  
 Beng. lvi. p. 83 (1887).  
*Motacilla feldeggii*, Mich. ; Sharpe, Cat. B. Brit. Mus. x. p. 527, pl. 8. figs. 1–4 (1885) ; Oates, Faun.  
 Brit. Ind., Birds, ii. p. 297 (1890).

- No. 1481. Panjah, April 17, 1874.—Length 6·9 inches, wing 3·2, tail 2·8, tarsus 0·95 ;  
 expanse 10·2 ; bill from front 0·41, from gape 0·62 ; length of foot 1·55, spread of  
 foot 1·13 ; middle toe 0·8, hind toe 0·7, hind claw 0·37. Iris dark brown ; bill black ;  
 feet black, soles greenish. Wings reach within 1·25 inch of end of tail.  
 No. 1535, ♂ ad. Panjah, April 25, 1874.—Length 7 inches, wing 3·25, tail 2·8, tarsus 1 ;



expanse 10·25; bill from front 0·48, from gape 0·7; length of foot 1·45, spread of foot 1·1; middle toe 0·78, hind toe 0·65, hind claw 0·32; height of bill in region of nostrils 0·17, its width 0·16. Iris dark hazel; bill black; feet black, soles dusky cinereous.

No. 1650. Sarikol, May 10, 1874.

Writing from Panjah, Dr. Stoliczka says that this species evidently breeds in the neighbourhood.

# 111. MOTACILLA MELANOPE.

*Motacilla sulphurea*, Bechst.; Severtz. Turkest. Jevotn. p. 67 (1873); Blanf. East. Persia, ii. p. 233 (1876).

*Calobates melanope* (Pall.); Prjev. in Rowley's Orn. Misc. ii. p. 193 (1877); Bidd. Ibis, 1881, p. 68; Scully, t. c. p. 542; C. Swinh. Ibis, 1882, p. 109.

*Motacilla melanope*, Dresser, Ibis, 1876, p. 177; Wardl. Ramsay, Ibis, 1880, p. 60; Severtz. Ibis, 1883, p. 64; Sharpe, Cat. B. Brit. Mus. x. p. 499 (1885); Oates, Faun. Brit. Ind., Birds, ii. p. 293 (1890).

*Calobates sulphurea*, Hume & Henders. Lahore to Yark. p. 224 (1873); Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 86.

*Motacilla boarula*, Radde, Ornis, iii. p. 485 (1887).

No. 466. Kargil, August 19, 1873.

No. 825. Sháhídúla, October 19, 1873.

Colonel Biddulph obtained this species near Sonámarg on the 17th of July, and in the Indus Valley on the 6th of the same month. Dr. Henderson shot a specimen at Kargil in Ladák on the 23rd of October.

# 112. MOTACILLA CITREOLA.

*Motacilla citreola*, Pall.; Prjev. in Rowley's Orn. Misc. ii. p. 193 (1877); Dresser, Ibis, 1876, p. 178; Finsch, Verh. z.-b. Ges. Wien, xxix. p. 175 (1879); Sharpe, Cat. B. Brit. Mus. x. p. 503 (1885); id. Trans. Linn. Soc. (2) Zool. v. p. 78 (1889); Oates, Faun. Brit. Ind., Birds, ii. p. 298 (1890).

*Budytes citreola*, Severtz. Turkest. Jevotn. pp. 67, 139 (1873); Blanf. East. Persia, ii. p. 235 (1876); Scully, Str. F. iv. p. 151 (1876); Prjev. in Rowley's Orn. Misc. ii. p. 193 (1877); Bidd. Ibis, 1881, p. 69; Scully, t. c. p. 452; C. Swinh. Ibis, 1882, p. 110; Severtz. Ibis, 1883, p. 80.

No. 479, adult. Shargol, August 20, 1873.

No. 716, imm. Tanksi, September 17, 1873.

No. 738, imm. Tanksi, September 18, 1873.

No. not given, ♀ imm. Sarikol, May 9, 1874.—Length 7 inches, wing 3·12, tail 2·9, tarsus 0·92; expanse 10; bill from front 0·5, from gape 0·68; length of foot 1·55, spread 1·1; middle toe 0·78, hind toe 0·73, hind claw 0·4; wings reach within 1·9 of end of tail. Iris brown; bill black; feet black, soles greenish yellow-brown.

No. 1607, ♂ adult. Sarikol, May 9, 1874.—Length 7·5 inches, wing 3·5, tail 3·25, tarsus 1·1; expanse 11; bill from front 0·52, from gape 0·76; length of foot 1·7, middle toe 0·8, hind toe 0·76, hind claw 0·4; wings reach within 1·85 of end of tail. Iris brown; bill black; feet black, soles yellowish.

No. 1308, ♂ adult. Sarikol, May 9, 1874.—Length 7·5 inches, wing 3·42, tail 3·1, tarsus 1·1; expanse 11; bill from front 0·52, from gape 0·75; length of foot 1·65, spread

1·2; middle toe 0·8, hind toe 0·78, hind claw 0·4; wings reach within 1·9 of end of tail.

No. 1647. Sarikol, May 10, 1874.

Dr. Scully writes:—"This species was very common in the plains from March to August, and was met with in the valley of the Karakash at an elevation of about 12,000 feet near the end of the latter month; it was never observed in winter. The bird was never seen near houses, but always in swampy ground and about marshes. It breeds probably about the month of May, as quite a young nestling was obtained on the 15th June. The Turki name for this species is 'Sarik Sunduk,' *i. e.* the Yellow Wagtail."

### 113. MOTACILLA CITREOLOIDES.

*Budytes citreoloides*, Hume & Henders. Lahore to Yark. p. 224 (1873); Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 86.

*Budytes citreola*, var. *melanonota*, Severtz. Turkest. Jevotn. pp. 67, 139 (1873).

*Motacilla citreoloides*, Dresser, Ibis, 1876, p. 178; Sharpe, Cat. B. Brit. Mus. x. p. 507 (1885); Oates, Faun. Brit. Ind., Birds, ii. p. 299 (1890).

*Budytes calcaratus*, Blyth; Bidd. Ibis, 1881, p. 69; Scully, t. c. p. 452; C. Swinh. Ibis, 1882, p. 110; Bidd. t. c. p. 280; Severtz. Ibis, 1883, p. 63.

Nos. 404, 405, imm. Mataian, August 14, 1873.

No. 434, imm. Tashgam, August 17, 1873.

No. 586, imm. Leh, August 30, 1873.—Length 7 inches, wing 3·1, tail 2·9, tarsus 0·9; expanse 9·6; bill from front 0·5, from gape 0·73; length of foot 1·7, hind claw 0·45. Iris brown; bill black; feet black.

No. 617, imm. Leh, September 4, 1873.

No. 653, imm. Leh, September 9, 1873.

No. 1605, ♂ adult. Sarikol, May 9, 1874 (*Capt. Trotter*).

No. 1606, ♂ adult. Sarikol, May 9, 1874.—Length 7·4 inches, wing 3·45, tail 3·1, tarsus 1·13; expanse 10·9; bill from front 0·52, from gape 0·75; length of foot 1·8, spread 1·25; middle toe 0·85, hind toe 0·9, hind claw 0·5; wings reach within 1·9 of end of tail. Iris dark brown; bill black; feet brownish black, soles yellowish.

Colonel Biddulph obtained specimens at Dras and Kargil in July.

### Genus **ANTHUS**.

#### 114. ANTHUS TRIVIALIS.

*Pipastes arboreus*, Hume & Henders. Lahore to Yark. p. 226 (1873).

*Anthus trivialis* (L.); Dresser, Ibis, 1876, p. 179; Blanf. East. Persia, ii. p. 235 (1876); Bidd. Ibis, 1881, p. 70; Scully, t. c. p. 452; C. Swinh. Ibis, 1882, p. 110; Sharpe, Cat. B. Brit. Mus. x. p. 545 (1885); Oates, Faun. Brit. Ind., Birds, ii. p. 302 (1890).

*Anthus arboreus*, Severtz. Turkest. Jevotn. pp. 67, 139 (1873); Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 86; Radde, Ornis, iii. p. 485 (1887).

*Pipastes agilis* (nec Sykes); Stoliczka, Str. F. ii. p. 463 (1874).

*Anthus microrhynchus*, Severtz. Ibis, 1883, p. 63.

No. 609. Leh, August 3, 1873.

No. 620. Leh, September 4, 1873.

No. 641. Leh, September 9, 1873.

No. 756. Lukung, September 20, 1873.

No. 1479, ♂ adult. Panjah, April 17, 1874.—Bill dusky black above, fleshy at lower base, dusky at tip; feet fleshy, soles white; iris dark brown. Length 7·0 inches, wing 3·7, tail 2·8, tarsus 0·9.

No. 1516, ♂ adult. Panjah, April 23, 1874.

No. 1582, adult. Langarkish, April 26, 1874.

Colonel Biddulph procured a female bird at Leh on the 4th of September, and a male at Tanksi (13,200 feet) on the 14th of September.

Dr. Henderson obtained numerous specimens in the neighbourhood of Sanju and Oitográk in the plains of Yarkand, where they were found in the fields among cultivation.

#### 115. ANTHUS SIMILIS.

*Agrodroma jerdoni* (Finsch); Hume & Henders. Lahore to Yark. p. 227, pl. xxi. (1873); Wardlaw Ramsay, Ibis, 1880, p. 61.

*Anthus sordidus* (nec Rüpp.); Blanf. East. Persia, ii. p. 237 (1876).

*Anthus jerdoni*, Sharpe, Cat. B. Brit. Mus. x. p. 562 (1885).

*Anthus similis*, Jerd.; Oates, Faun. Brit. Ind., Birds, ii. p. 306 (1890).

Nos. 130, 131. Tinali, July 18, 1873.

Dr. Henderson obtained a specimen at the foot of the hills leading into Kashmir.

#### 116. ANTHUS RICHARDI.

*Anthus richardi*, V.; Blanf. East. Persia, ii. p. 236 (1876); Sharpe, Cat. B. Brit. Mus. x. p. 564 (1885).

*Corydalla richardi*, Scully, Str. F. iv. p. 152 (1876); Prjev. in Rowley's Orn. Misc. ii. p. 195 (1877); Oates, Faun. Brit. Ind., Birds, ii. p. 307 (1890).

Dr. Scully writes:—"This species is a seasonal visitant to Eastern Turkestan, where it breeds; it was observed on several occasions in June and in July, but was never met with in winter. The bird frequents undulating ground covered with short grass, and is very shy. It runs about very swiftly in the uneven ground which it affects, and its flight is strong and undulating. Its note, which it utters as it rises, is a sweet soft twitter. It probably hatches about the beginning of July, as on the 31st of that month some young birds of this species were seen between Igarchi and Posgam. The Turki name for this bird is 'Sairam,' which means 'singing.'"

#### 117. ANTHUS CAMPESTRIS.

*Anthus campestris* (L.); Severtz. Turkest. Jevotn. pp. 67, 141 (1873); Dresser, Ibis, 1876, p. 178; Blanf. East. Persia, ii. p. 237 (1876); Bidd. Ibis, 1881, p. 70; C. Swinh. Ibis, 1882, p. 110; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 86; Sharpe, Cat. B. Brit. Mus. x. p. 570 (1885); id. Trans. Linn. Soc. (2) Zool. v. p. 79 (1889); Oates, Faun. Brit. Ind., Birds, ii. p. 309 (1890).

*Agrodroma campestris*, Prjev. in Rowley's Orn. Misc. ii. p. 195 (1877).

No. 1466. Panjah, April 14-23, 1874.

118. *ANTHUS PRATENSIS*.

*Anthus pratensis* (L.) ; Severtz. Turkest. Jevotn. pp. 67, 139 (1873) ; Dresser, Ibis, 1876, p. 179 ; Blanf. East. Persia, ii. p. 236 (1876) ; Prjev. in Rowley's Orn. Misc. ii. p. 194 (1877) ; Homeyer & Tancré, MT. orn. Ver. Wien, 1883, p. 86 ; Sharpe, Cat. B. Brit. Mus. x. p. 580 (1885) ; Radde, Orn. iii. p. 485 (1887).

No. 1159. Kashghar, December 17, 1873.—Length 6·25 inches, wing 3·1, tail 2·3, tarsus 0·8 ; expanse 9·8 ; bill from front 0·44, from gape 0·62 ; length of foot 1·7, hind claw 0·5 ; wings reach within 1·3 of end of tail. Iris blackish brown ; bill horny, pale fleshy below, dark at tip ; feet pale dusky, tarsi paler. (*Capt. Trotter*.)

No. 1333. Kashghar, February 10, 1874.

Dr. Stoliczka says that this bird was not uncommon near water in December.

119. *ANTHUS CERVINUS*.

*Anthus cervinus* (Pall.) ; Dresser, Ibis, 1876, p. 180 ; Blanf. East. Persia, ii. p. 236 (1876) ; Finsch, Verh. z.-b. Ges. Wien, xxix. p. 66 (1879) ; Bidd. Ibis, 1881, p. 70 ; Homeyer & Tancré, MT. orn. Ver. Wien, 1883, p. 86 ; Sharpe, Cat. B. Brit. Mus. x. p. 586 (1885) ; Oates, Faun. Brit. Ind., Birds, ii. p. 310 (1890).

*Anthus cervinus*, var. *rufogularis*, Severtz. Turkest. Jevotn. pp. 67, 140 (1873).

No. 1474, adult. Panjah, April 16, 1874.—Bill horny black, yellowish at base, dark at tips ; feet fleshy brown, tarsi paler, soles pale yellow ; iris brown. Length 6·5 inches, wing 3·45, tail 2·5, tarsus 0·9.

120. *ANTHUS SPIPOLETTA*.

*Anthus aquaticus*, Bechst. ; Severtz. Turkest. Jevotn. p. 67 (1873) ; Scully, Str. F. iv. p. 152 (1876).

*Anthus blakistoni*, Swinh. ; Bidd. Ibis, 1881, p. 70 ; Scully, ibid. p. 453 ; C. Swinh. Ibis, 1882, p. 110 ; Scully, J. A. S. Beng. lvi. p. 84 (1887).

*Anthus spinoletta* (L.) ; Dresser, Ibis, 1876, p. 180 ; Blanf. East. Persia, ii. p. 236 (1876) ; Prjev. in Rowley's Orn. Misc. ii. p. 194 (1877) ; Menzbier, Ibis, 1885, p. 354 ; Radde, Orn. iii. p. 485 (1887) ; Oates, Faun. Brit. Ind., Birds, ii. p. 312 (1890).

*Anthus spipoletta*, Sharpe, Cat. B. Brit. Mus. x. p. 592 (1885) ; id. Trans. Linn. Soc. (2) Zool. v. p. 79 (1889).

No. 948. Sanju, November 1, 1873.

No. 1034. Yarkand, November 21, 1873.

Nos. 1078, 1083, 1085, 1089. Yarkand, November 28, 1873.

Nos. 1137, 1138. Kashghar, December 12, 1873.

No. 1157. Kashghar, December 17, 1873.—Length 7·3 inches, wing 3·75, tail 2·9, tarsus 0·9 ; expanse 11·7 ; bill from front 0·55, from gape 0·7 ; length of foot 1·6, hind claw 0·4 ; wings reach within 1·5 of end of tail. Iris dark brown ; bill blackish fleshy, dark at tip ; feet blackish horny brown.

Nos. 1205, 1207. Kashghar, Jan. 17, 1874.

No. 1218. Kashghar, January 20, 1874.—Length 7·2 inches, wing 3·75, tail 2·9, tarsus 0·95 ; expanse 11·6 ; bill from front 0·52, from gape 0·75 ; length of foot 1·63. Iris dark hazel-brown ; bill blackish, pale below, yellowish at base ; feet brownish black.

No. 1267. Kashghar, January 24, 1874.

No. 1335. Kashghar, February 11, 1874.

No. 1343. Kashghar, February 12, 1874.

Colonel Biddulph says that this Pipit was very common about water all through the winter in the plains of Turkestan.

"This species," Dr. Scully says, "was common in Kashgharia in winter. I shot several of these birds near Beshkant, in the beginning of February, where they were running among the rushes in frozen marshy ground. In the spring the birds frequented moist meadow-ground and the vicinity of running water, feeding on insects and small worms. I procured one specimen at Yarkand on the 7th April in full summer plumage. The Turki name for the bird is 'Boz sunduk,' 'the Ashy Wagtail.'"

### Family CETHIIDÆ.

#### Genus **CERTHIA**.

#### 121. CETHIA HIMALAYANA.

*Certhia himalayana*, Vig.; Bidd. Ibis, 1881, p. 50; Scully, t. c. p. 431; Oates, Faun. Brit. Ind., Birds, i. p. 329 (1889).

No. 64. Murree, June 30, 1873.

Nos. 85, 86. Changligally, Murree, July 3, 1873.

No. 307. Sonámarg, August 10, 1873.

No. 384. Baltal, August 12, 1873.

According to Dr. Stoliczka's 'Diary' this species was not common near Sonámarg.

#### 122. CETHIA HODGSONI.

*Certhia familiaris*, L.; Hume & Henders. Lahore to Yark. p. 180 (1873); Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 83.

*Certhia hodgsoni*, Brooks; Oates, Faun. Brit. Ind., Birds, i. p. 329 (1889).

Met with by Dr. Henderson in Kashmir.

#### Genus **TICHODROMA**.

#### 123. TICHODROMA MURARIA.

*Tichodroma muraria* (L.); Hume & Henders. Lahore to Yark. p. 181 (1873); Dresser, Ibis, 1876, p. 176; Blanf. East. Persia, ii. p. 223 (1876); Scully, Str. F. iv. p. 136 (1876); Prjev. in Rowley's Orn. Misc. ii. p. 166 (1877); Bidd. Ibis, 1881, p. 30; Scully, ibid. p. 431; C. Swinh. Ibis, 1882, p. 103; Severtz. Ibis, 1883, p. 71; Zarudn. Ois. Transcasp. p. 47 (1885); Menzbier, Ibis, 1875, p. 357; Oates, Faun. Brit. Ind., Birds, i. p. 334 (1889); Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 77 (1889).

*Tichodroma phænicoptera*, Severtz. Turkest. Jevotn. p. 66 (1873).

No. 766. Lukung, September 20, 1873.

No. 905. Sanju, October 28, 1873.

No. 920. Sanju, October 29, 1873.

No. 925. Sanju, October 29, 1873.

All the above specimens are in full winter plumage; those killed in October being of a purer grey, the September specimen rather browner.



No. 1107. Yangihissár, December 2, 1873.

Dr. Stoliczka mentions that this species remains during the winter near Yangihissár, and he found it breeding in the Duba Valley in June.

Dr. Henderson states that this species was seen almost daily from near Birnbur right through Kashmir and Ladák to beyond Leh; but it never occurred after leaving the Pangong Lake. On the return journey the bird had commenced finding its way down to those portions of the plains which lie near the foot of the hills, and on the day of his return he killed a specimen at Lahore.

Dr. Scully writes:—"This species was not noticed in the plains, and was first met with in the hills in September. At Tadlik, below the Kirghiz encampment at Kichik Yailak, I saw two of these birds, one of which I shot. They flew from the bank of the stream to the hillside, up which they ran pretty nimbly."

Colonel Biddulph has sent us the accompanying note:—"I first saw this near the Fotala; there were a good many near Tanksi on the rocks overhanging the river, and they were very common throughout the plains, on rocks and even on low walls alongside of the roads and houses. I did not, however, see the species at Marálbáshi, and I never noticed it out of the plains; but it was still about these when we returned in May."

#### Family SITTIDÆ.

##### Genus **SITTA**.

#### 124. *SITTA KASHMIRENSIS*.

*Sitta cashmirensis*, Brooks, J. A. S. Beng. xli. part 2, p. 75.

*Sitta kashmirensis*, Brooks; Oates, Faun. Brit. Ind., Birds, i. p. 303 (1889).

No. 299. Sonámarg, August 10, 1873.—Length 5·25 inches, wing 3·2, tail 1·62, tarsus 0·75; expanse 9·5; bill from front 0·6, from gape 0·82; length of foot 1·05. Iris very dark brown; bill blackish, horny above; feet bluish leaden.

Nos. 304, 305. Sonámarg, August 10, 1873.

No. 349. Sonámarg, August 12, 1873.

No. 372. Baltal, August 12, 1873.

#### 125. *SITTA LEUCOPSIS*.

*Sitta leucopsis*, Gould; Hume & Henders. Lahore to Yark. p. 181 (1873); Bidd. Ibis, 1881, p. 50; Scully, t. c. p. 431; Oates, Faun. Brit. Ind., Birds, i. p. 306 (1889).

No. 82. Murree, July 2, 1873.

According to Dr. Henderson this Nuthatch was only met with by him in the Upper Sind Valley, Kashmir. Here it was not uncommon, but it so persistently affected the tops of the loftiest trees that very few specimens were obtained.

Family PARIDÆ.

Genus **PARUS**.

126. PARUS ATRICEPS.

*Parus bokharensis*, Severtz. Turkest. Jevotn. p. 66 (1873); Dresser, Ibis, 1876, p. 92.

*Parus cinereus*, V.; Hume & Henders. Lahore to Yark. p. 230 (1873); Wardlaw Ramsay, Ibis, 1880, p. 62; C. Swinh. Ibis, 1882, p. 110; Sharpe, Trans. Linn. Soc. (2) Zool. v. part 3, p. 76 (1889).

*Parus nipalensis*, Hodgs.; Bidd. Ibis, 1881, p. 73; Scully, t. c. p. 568; Barnes, Str. F. ix. p. 217 (1880).

*Parus atriceps*, Horsf.; Oates, Faun. Brit. Ind., Birds, i. p. 46 (1889).

No. 37, ♂ ad. Murree, June 25, 1873.

No. 115, ad. Murree, July 13, 1873.

No. 232, imm. Srinagar, July 31, 1873.

No. 468, adult. Tashkyum, August 20, 1873.—Bill horny black; feet bluish; iris blackish. Length 6·0 inches, wing 2·9, tail 2·5, tarsus 0·75.

No. 474, imm. Shargol, August 20, 1873.

Common in Kashmir according to Dr. Henderson, who obtained several specimens in the Sind Valley both in June and October.

127. PARUS CYANUS.

*Parus cyanus*, Pall.; Hume & Henders. Lahore to Yark. p. 232 (1873); Severtz. Turkest. Jevotn. p. 66 (1873); Dresser, Ibis, 1876, p. 93; Scully, Str. F. iv. p. 154 (1876).

No. 583. South of Sanju Pass, Karakash Valley, October 22, 1873.—Length 5·2 inches, wing 2·75, tail 2·45. Bill horny blackish; feet pale bluish.

No. 574. Tām, October 25, 1873.—“Kok-talké” (Kokan).

No. 957. Bora, November 4, 1873.

No. 1043. Yarkand, November 23, 1873.

No. 1150. Kashghar, December 15, 1873.

Nos. 1858, 1859. Duba, June 6, 1874.

No. 1659. Pasrobat, May 13, 1874.

In his ‘Diary’ Dr. Stoliczka says that *P. cyanus* was evidently breeding near Pasrobat, and of two females shot near Duba, “one had well-developed eggs, but had not begun laying; the other had small eggs.” On the 5th of June, writing from the camp about two miles west of Mazar Khoja, he says that the species was breeding in the Duba Valley.

Dr. Henderson writes:—“This beautiful little species was common in August in the tamarisk-jungles on the banks of the Arpalák, within fifteen miles of the plains of Yarkand. It had apparently been recently breeding, as all the specimens obtained were young birds, one of them being scarcely fully fledged.” Dr. Scully also observes:—“This pretty little species was met with in small flocks among the tamarisk-bushes which grow on the banks of the Arpalák and Sanju streams. It had evidently been breeding in those places.”

Colonel Biddulph sends us the following note:—“We met this first in November between Sanju and Yarkand in small scrub jungle, and everywhere in similar localities throughout the winter all over the plains of Turkestan. They were especially common at

Marálbáshi. We again saw them on our way up to the Pámir, but not, so far as I remember, in Wakhán. We did not see them about the plains of Turkestan in summer; but then we found them higher up, as in the Kulustan valley."

128. *PARUS MONTICOLA*.

*Parus monticolus*, Vig.; Hume & Henders. Lahore to Yark. p. 229 (1873).

*Parus monticola*, Oates, Faun. Brit. Ind., Birds, i. p. 49 (1889).

Nos. 34, 36, adults. Murree, June 25, 1873.

Common in Kashmir, according to Dr. Henderson.

Genus **LOPHOPHANES**.

129. *LOPHOPHANES MELANOLOPHUS*.

*Parus melanolophus*, Vig.; Bidd. Ibis, 1881, p. 72; Scully, t. c. p. 568.

*Lophophanes melanolophus*, Wardlaw Ramsay, Ibis, 1880, p. 61; Oates, Faun. Brit. Ind., Birds, i. p. 57 (1889).

No. 328. Sonámarg, August 11, 1873.

No. 351. Sonámarg, August 12, 1873.—Length 4·4 inches, wing 2·55, tail 1·75, tarsus 0·65; expanse 7·5; bill from front 0·32, from gape 0·45; length of foot 1·1. Iris dark brown; bill black; feet bluish.

Nos. 356, 364. Sonámarg, August 12, 1873.

No. 386. Baltal, August 12, 1873.

130. *LOPHOPHANES RUFINUCHALIS*.

*Parus rufonuchalis*, Blyth; Bidd. Ibis, 1881, p. 72; Scully, t. c. p. 568.

*Lophophanes rufonuchalis*, Hume & Henders. Lahore to Yark. p. 229 (1873); Wardlaw Ramsay, Ibis, 1880, p. 62; Bidd. Ibis, 1882, p. 281; Oates, Faun. Brit. Ind., Birds, i. p. 58 (1889).

No. 326, imm. Sonámarg, August 11, 1873.

No. 350, adult. Sonámarg, August 12, 1873.—Length 5·45 inches, wing 2·86, tail 2·1, tarsus 0·75; expanse 9; bill from front 0·45, from gape 0·55; length of foot 1·3. Iris brown; bill black; feet bluish.

No. 361. Sonámarg, August 12, 1873.

No. 376. Baltal, August 12, 1873.

Genus **SYLVIIPARUS**.

131. *SYLVIIPARUS MODESTUS*.

*Sylviparus modestus*, Burt.; Oates, Faun. Brit. Ind., Birds, i. p. 53 (1889).

No. 500, ♀. About Kharbu, 12,000 feet, August 22, 1873.—Length 4 inches, wing 2·3, tail 1·3, tarsus 0·55; expanse 7·25; bill from front 0·32, from gape 0·4. Iris dark brown; bill bluish horny; feet bluish.

No. 547. Leh, August 27, 1873.

No. 564. Leh, August 28, 1873.

Dr. Stoliczka says that this species was very common near Leh in August. Here Colonel Biddulph also found great numbers of old and young birds in September. He says:—"We used to see them picking at those excrescences so common on willow-leaves."

Genus **ÆGITHALISCUS.**

132. *ÆGITHALISCUS ERYTHROCEPHALUS.*

*Ægithaliscus erythrocephalus* (Vig.); Oates, Faun. Brit. Ind., Birds, i. p. 50 (1889).

No. 39. Murree, June 25, 1873.

Genus **ÆGITHALUS.**

133. *ÆGITHALUS CORONATUS.* (Plate VII.)

*Ægithalus coronatus*, Severtz. Turkest. Jevotn. p. 136, pl. 9. fig. 3 (1873); Dresser, Ibis, 1876, p. 175.; Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 76 (1889).

*Ægithalus stoliczkæ*, Hume, Str. F. ii. p. 521 (1874).

No. 941, ♂ ad. Bora, November 4, 1873.—Bill bluish horny; feet bluish; iris blackish brown. Length 4 inches, wing 2, tail 1·7, tarsus 0·6.

Nos. 1219, 1233, adults. Marálbáshi, January 1874.

These specimens were identified by Dr. Severtzoff himself as belonging to his species, *Æ. coronatus*.

Colonel Biddulph writes:—"One or two specimens were shot somewhere near Kashghar by Dr. Stoliczka. In the jungles about Marálbáshi they were common. They were in parties of a dozen, threading their way in and out of the bushes."

Genus **LEPTOPECILE.**

134. *LEPTOPECILE SOPHIÆ.* (Plate VIII.)

*Leptopæcile sophiæ*, Severtz. Turkest. Jevotn. pp. 66, 135, pl. viii. figs. 8, 9 (1873); Dresser, Ibis, 1876, p. 171; Scully, Str. F. iv. p. 153 (1876); Prjev. in Rowley's Orn. Misc. ii. p. 191 (1877); Bidd. Ibis, 1881, p. 37; Scully, ibid. p. 567; Bidd. Ibis, 1882, p. 280; Oates, Faun. Brit. Ind., Birds, i. p. 246 (1889).

*Stoliczkana stoliczkæ*, Hume, Str. F. ii. p. 513 (1874).

Nos. 814, 817, 821. Sháhídúla, October 19, 1873.

No. 858, ♂. Gidjik, October 24, 1873.—Bill black; feet horny blackish brown; iris bright red. Length 4·6 inches, wing 2·1, tail 2·15, tarsus 0·72.

No. 859, ♀ ad. Gidjik, October 24, 1873.

Nos. 871, 872, 873. Tám, October 25, 1873.

Nos. 1408, 1410, ♂. Akdarra (Aktala), March 22, 1874.

Colonel Biddulph sends us the following note:—"We met with this species on our way to Yarkand, in the Karakash Valley, at elevations of from 11,000 to 14,000 feet. There are

lots of low thorny bushes in this valley, and in these we found the birds in pairs. They were pretty numerous, but very difficult to shoot, as on our approach they concealed themselves. I heard no song. A few days later we found them immediately below the Sanju Pass, on the northern side, in similar jungle at about 11,000 feet. We also saw this species, I am sure, on our way up to the Pamir in similar localities at about the same elevations. A young bird was certainly procured at Leh in June, but with this exception we saw none elsewhere on our way back."

"This pretty little species," writes Dr. Scully, "was met with in Kashgharia in August along the banks of the Karakash River, at Pilataghach, Toghrasu, Oibuk, Sháhídúla, Balakchi, and Gulgun Shah, at elevations of from 10,800 to 13,000 feet. The birds were numerous and continually hopping about or flitting from place to place in the tamarisk, buckthorn, and *Hololachne* bushes growing on the banks of the river; they uttered a pretty loud, sweet chirping cry. I do not know which was most difficult, to see these birds, to shoot them, or to find them when shot, in the dense bushes which they frequent."

#### Genus **PANURUS**.

##### 135. PANURUS BIARMICUS.

*Calamophilus biarmicus* (L.) ; Scully, Str. F. iv. p. 154 (1876) ; Homeyer & Tancreé, MT. orn. Ver. Wien, 1883, p. 85.

*Panurus barbatus*, Severtz. Turkest. Jevotn. p. 66 (1873).

*Panurus biarmicus*, Dresser, Ibis, 1876, p. 94 ; Prjev. in Rowley's Orn. Misc. ii. p. 191 (1877).

*Calamophilus barbatus*, Radde, Ornis, iii. p. 476 (1887).

No. 935, ♂. Oi-tográk, November 4, 1873.—Length 6·8 inches, wing 2·45, tail 3·4; expanse 7·5. Iris golden; bill reddish yellow; feet black.

No. 936, ♀. Oi-tográk, November 4, 1873.—Length 6·85 inches, wing 2·5, tail 3·5, tarsus 0·9; expanse 7·07. Iris yellow; bill dusky yellow; feet black; wings reach within 2·75 inches of end of tail.

Nos. 937, 939. Oi-tográk, November 4, 1873.

Nos. 1002, 1003. Yarkand, November 11, 1873.

No. 1015. Yarkand, November 13, 1873. "Kúckacé" (Yarkand); "Cácheé" (Kokan).

Nos. 1016, 1022, 1023. Yarkand, November 13, 1873.

Nos. 1036, 1037, 1038, 1040, 1041. Yarkand, November 22, 1873.

All young birds of the last season, No. 1040 having still some black streaks on the back.

Nos. 1081, 1087. Yarkand, November 28, 1873.

No. 1235. Marálbáshi, January 1874.

Nos. 1713, 1716. Yarkand, May 22, 1874.

Dr. Stoliczka states in his 'Diary' that he shot the first specimen of this bird, which he did not know, just as he was leaving Oi-tográk, in the high reed-grass, where it was feeding on the seeds of the latter. He got it again in November near Yarkand in swampy ground. It is rather interesting, in view of the affinities set forward for the Reedling by Blyth and others, that Dr. Stoliczka, in the later pages of his diary, refers to it as the "new *Emberiza*!"

"*Calamophilus biarmicus*," writes Colonel Biddulph, "we first got between Sanju and Kárgchalik at Oi-tográk in November, in high reed-grass, in bush-jungle, near water,



perching on the reeds; again in the swamps round Yarkand, and again in similar localities about Marálbáshi it was very common, in flocks of from 30 to 40. This was in winter. I do not remember seeing them anywhere in summer, and certainly never on the Pamir or in Wakhán."

Dr. Scully says:—"The Bearded Reedling was exceedingly common in the plains of Eastern Turkestan, among the reeds and rushes growing in marshy ground and on the borders of lakes. I did not observe it in winter, but it was said to be a permanent resident in the country. These birds take short wavering flights, in small flocks usually, and as they fly make a curious sound, which is sought to be imitated by the Turki name given to the species, 'Jingjing.' Near Yarkand this bird breeds in April and May."

#### Family MELIPHAGIDÆ.

##### Genus **ZOSTEROPS.**

#### 136. *ZOSTEROPS PALPEBROSA.*

*Zosterops palpebrosa* (T.); Oates, Faun. Brit. Ind., Birds, i. p. 214 (1889).

No. 103. Murree, July 7, 1873.

No. 127. Tinali, Jhelum Valley, July 18, 1873.

No. 143. Chackoti, July 22, 1873.

No. 279. Gond, August 8, 1873.

Colonel Biddulph procured specimens at Baramula in August, and says that the species was very common in the Jhelum Valley in Kashmir.

#### Family REGULIDÆ.

##### Genus **REGULUS.**

#### 137. *REGULUS REGULUS.*

*Motacilla regulus*, Linn. Syst. Nat. i. p. 338 (1766).

*Regulus cristatus*, Koch; Severtz. Turkest. Jevotn. p. 66 (1873); Dresser, Ibis, 1876, p. 92; Bidd. Ibis, 1881, p. 67; Scully, t. c. p. 450; Bidd. Ibis, 1882, p. 279; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 84; Oates, Faun. Brit. Ind., Birds, i. p. 344 (1889).

*Regulus himalayensis*, Blyth; Prjev. in Rowley's Orn. Misc. ii. p. 173 (1877).

No. 919, ad. Sanju, November 1, 1873.—Bill black; feet horny black. Length 4.15 inches, wing 2.1, tail 1.7, tarsus 0.75.

No. 942, ♂ ad. Bora, November 4, 1873.—Bill black; feet horny brown. Length 4.2 inches, wing 2.2, tail 1.6.

No. 945, ad. Bora, November 4, 1873.

Nos. 1117, 1121, ad. Yangihissár, December 2, 1873.

Nos. 1134, 1144, ad. Kashghar, December 11-14, 1873.

Also seen by Colonel Biddulph at Leh in September.

## Family LANIIDÆ.

Genus **LANIUS**.138. **LANIUS HOMEYERI**.

*Lanius homeyeri*, Cab. ; Severtz. Str. F. iii. p. 430 (1875) ; Scully, Str. F. iv. p. 136 (1876) ; Bidd. Ibis, 1881, p. 51 ; Scully, ibid. p. 432 ; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 87 ; Menzbier, Ibis, 1885, p. 357 ; Oates, Faun. Brit. Ind., Birds, i. p. 462 (1889).

*Lanius leucopterus*, Severtz. Turkest. Jevotn. p. 67 (1863) ; Dresser, Ibis, 1876, p. 184.

No. 1097. Yangihissár, November 30, 1873.—Length 10·5 inches, wing 4·7, tail 4·6, tarsus 1·2 ; expanse 15 ; bill from front 0·7, from gape 1·17 ; length of foot 1·8. Iris hazel-brown ; bill bluish horny above, pale at base and sides, pale fleshy below, with dusky tip ; feet horny black ; wings reach within 3 inches of end of tail.

No. 1337. Kashghar, February 11, 1874.

No. 1376. Jigda, February 25, 1874.

“This Shrike,” Dr. Scully writes, “was tolerably common near Kashghar and Yarkand in winter ; it was never seen in spring or summer, as it had then migrated northwards. It chiefly affects bare places with a few trees scattered about, but is occasionally seen near villages. Near Kizil in January I saw some of these Shrikes perched on small leafless trees, sitting very motionless and apparently not alarmed when one approached them even pretty closely. This Shrike was occasionally trained to capture small birds, such as Sparrows, &c. . . . It is the winter Shrike of Kashgharia, as *Lanius arenarius* is the summer one. The Turki name for the species is ‘Ala ghurulai,’ the Variegated Shrike.”

139. **LANIUS ERYTHRONOTUS**.

*Lanius erythronotus* (Vig.) ; Hume & Henders. Lahore to Yark. p. 182 (1873) ; Bidd. Ibis, 1881, p. 51 ; Scully, t. c. p. 433 ; Oates, Faun. Brit. Ind., Birds, i. p. 464 (1889).

No. 27. Murree, June 24, 1873.

Nos. 138, juv., 140, ad. Hatti, Jhelum Valley, July 21, 1873.

No. 156, juv. Baramula, July 25, 1873.

No. 198. Srinagar, July 29, 1873.

No. 267. Srinagar, August 5, 1873 (Témbh).

Colonel Biddulph says that he saw this species only in Kashmir and Ladák, south of the Indus ; more were seen in the Indus Valley.

140. **LANIUS ISABELLINUS**.

*Lanius isabellinus*, Ehr. ; Severtz. Turkest. Jevotn. pp. 67, 144 (1873) ; Dresser, Ibis, 1876, p. 185 ; Blanf. East. Persia, ii. p. 139 (1876) ; Scully, Ibis, 1881, p. 433 ; C. Swinh. Ibis, 1882, p. 104 ; Severtz. Ibis, 1883, p. 70 ; Menzbier, Ibis, 1885, p. 357 ; Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 76 (1889).

*Lanius arenarius*, Blyth ; Hume & Henders. Lahore to Yark. p. 183, pl. iii. (1873) ; Scully, Str. F. iv. p. 137 (1876) ; Prjev. in Rowley's Orn. Misc. ii. p. 274 (1877) ; Scully, Ibis, 1881, p. 433.

*Lanius cristatus* (nec L.) ; Hume & Henders. Lahore to Yark. p. 182 (1873) ; Bidd. Ibis, 1881, p. 51.

*Otomela isabellina*, Zarudn. Ois. Transcasp. p. 35 (1885).

- No. 999, ad. Yarkand, November 12, 1873.—Length 7·5 inches, wing 3·57, tail 3·2, tarsus 0·95; expanse 11·2; bill from front 0·45, from gape 0·8; length of foot 1·55. Iris brown; bill dusky brown above, pale at base of lower mandible; feet brownish black.
- No. 1692, ad. East of Ighiz Yar, May 19, 1874.—Got four eggs on a pear-tree 10 feet above ground.
- No. 1693, ad. Kizil, May 19, 1874.—Got two eggs on a tree about 15 feet above ground.
- Nos. 1739, 1745, ad. Yarkand, May 15–20, 1874.
- No. 1839, ad. Kugiár, June 1, 1874.

In his 'Diary' Dr. Stoliczka has the following notes :—"Kizil, May 19. Near a small house and a few fields about ten miles east of Ighiz Yar I got the nest of this *Lanius* (shooting the female) on a pear-tree, between branches about ten feet above the ground. The nest is round, made of twigs outside, with some grass and cotton and old rags interwoven together. There were four eggs in the nest, the young being nearly fully developed. At Kizil I got another nest high up on a tree, with two fresh eggs." On the 31st of May, 1874, he states that he saw full-fledged young near Beshterek.

Colonel Biddulph sends us a note :—"I shot the first specimen, a solitary one, at Marál-báshi in July. It was peculiarly common everywhere in the plains when we returned in May." It is evidently this species, as Dr. Scully suspects, which was procured by Dr. Henderson and called *L. cristatus*. Dr. Scully writes :—"The Desert Shrike is very common in the plains of Kashgharia, where it breeds. I obtained my first specimen of this species near Yarkand on the 14th April, and from that date it was observed continuously up to the 15th of August, when I saw the last of this Shrike north of the Chuchu Pass, at an elevation of about 10,000 feet. It was not observed at all during the winter, and with the exception of possibly a few stray stragglers, the bird no doubt migrates from Eastern Turkestan about October, and this agrees exactly with the native account of the matter. The bird breeds in May and June." Dr. Scully gives a full account of the eggs.

#### Family AMPELIDÆ.

##### Genus **AMPELIS.**

#### 141. AMPELIS GARRULUS.

*Ampelis garrulus*, L.; Dresser, Ibis, 1876, p. 188; Scully, Str. F. iv. p. 152 (1876); Prjev. in Rowley's Orn. Misc. ii. p. 272 (1877); Homeyer & Tancré, MT. orn. Ver. Wien, 1883, p. 88; Sharpe, Cat. B. Brit. Mus. x. p. 212 (1885).

*Bombycilla garrula* (L.); Severtz. Turkest. Jevotn. p. 67 (1873).

This species was only procured by Dr. Scully, who writes :—"This bird was purchased for Mr. Shaw in the bazaar of Yarkand, where it was being carried about perched on a man's finger. It appeared to be very quiet in confinement, and was never heard to utter any sound. It soon died, however, and before we left Yarkand Mr. Shaw gave me the skin, as I had not been able to procure a specimen. When alive the bird had a beautiful appearance: its dense glossy feathers gave it rather the look of a perfect wax model than a living bird. I heard from several sources that this species was common in the hills near Aksu, and I also heard of its occurrence in Sarikol; the bird is never seen in the plains of Eastern

Turkestan, unless it be in captivity. The Yarkandis have an absurd legend about this bird being the grandsire of the common Hoopoe! A Yarkandi bird-catcher told me that its name was 'Tagh hüpüpi,' the 'Mountain Hoopoe;' but this designation was no doubt evolved out of his inner consciousness."

### Family SYLVIIDÆ.

#### Genus **ACROCEPHALUS**.

##### 142. **ACROCEPHALUS TURDOIDES**.

*Acrocephalus turdoides* (Meyer); Seebohm, Cat. B. Brit. Mus. v. p. 95 (1881); Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 84; Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 71 (1889).

*Acrocephalus arundinaceus*, L.; Scully, Str. F. iv. p. 146 (1876); Blanf. East. Persia, ii. p. 195 (1876).

I have examined the specimen procured by Dr. Scully at Yarkand on the 23rd of June, and there is no question of its being the true *A. turdoides*. The Yarkandi shikaris gave him the following information about this Reed-Warbler:—"The Turki name for the bird is 'Kanaichi.' It is a seasonal visitant, arriving about March, and leaving at the beginning of winter, when the water begins to freeze. It breeds in Yarkand, making its nest in the *yekan* (reeds), where it lives, and laying four eggs about the beginning of June. It does not migrate to Hindustan, but westwards to Mazendaran (an extensive forest-region in Persia near the borders of the Caspian)." Eggs were brought to Dr. Scully, who says that the species was often heard in reeds and marshy ground near Yarkand, but he could only procure one specimen.

##### 143. **ACROCEPHALUS STENTORIUS**.

*Acrocephalus stentorius* (H. & E.); Blanf. East. Persia, ii. p. 194 (1876); Seebohm, Cat. B. Brit. Mus. v. p. 98 (1881); C. Swinh. Ibis, 1882, p. 108; Zarudn. Ois. Transcasp. p. 42 (1885); Scully, J. A. S. Beng. lvi. p. 81 (1887); Oates, Faun. Brit. Ind., Birds, i. p. 356 (1889).

*Acrocephalus brunescens* (Jerd.); Hume & Henders. Lahore to Yark. p. 214, pl. xvi. (1873).

Nos. 200, 202, 206, 216, 220, 223, 227. Srinagar, July 29-31, 1873.

No. 217. Srinagar, August 3, 1873.—Length 7·35 inches, wing 3·38, tail 2·75, tarsus 1·1; expanse 10; bill from front 0·75, from gape 1·1; length of foot 1·4. Iris brown, with lighter round the pupil; bill blackish horny, pale below; feet bluish horny.

Very common in Kashmir, according to Dr. Henderson, breeding in that country. Dr. Stoliczka mentions that he found young birds near Srinagar in July.

##### 144. **ACROCEPHALUS AGRICOLA**.

*Acrocephalus agricola*, Jerd.; Seebohm, Cat. B. Brit. Mus. v. p. 105 (1881); Severtz. Ibis, 1883, p. 65; Zarudn. Ois. Transcasp. p. 42 (1885); Oates, Faun. Brit. Ind., Birds, i. p. 359 (1889).

*Salicaria capistrata*, Severtz. Turkest. Jevotn. pp. 66, 127 (1873); id. Str. F. iii. p. 425 (1875); Dresser, Ibis, 1876, p. 84.

*Salicaria modesta*, Severtz. Turkest. Jevotn. p. 66.

*Salicaria gracilis*, Severtz. t. c. p. 66.

- No. 204. Srinagar, July 29, 1873.  
 No. 235. Srinagar, August 1, 1873.  
 Nos. 1715, 1717. Yarkand, May 22, 1874.  
 No. 1782. Yarkand, May 24, 1874.

Colonel Biddulph says that he only procured this species in the Sind Valley.

Genus **TRIBURA**.

145. **TRIBURA MAJOR**. (Plate IX.)

- Lusciniola major* (Brooks) ; Seebohm, Cat. B. Brit. Mus. v. p. 124 (1881).  
*Acrocephalus macrorhynchus* (Hume) ; Scully, Str. F. iv. p. 146 (1876).  
*Dumeticola major*, Brooks ; Biddulph, Ibis, 1881, p. 65 ; Scully, t. c. p. 448.  
*Tribura major*, Oates, Faun. Brit. Ind., Birds, ii. p. 362 (1889).

- No. 300. Sonámarg, August 10, 1873.—Length 5·65 inches, wing 2·3, tail 2·35, tarsus 0·85 ; expanse 7·15 ; bill from front 0·38, from gape 0·8. Iris brown ; bill horny, yellow below ; feet light brown, tarsi yellowish fleshy.  
 No. 352. Sonámarg, August 12, 1873.—Length 6·2 inches, wing 2·38, tail 2·5, tarsus 0·8 ; expanse 7·2 ; length of foot 1·3. Iris brown ; bill horny, yellow below ; feet pale, with slight fleshy tinge.  
 Nos. 375, 383. Baltal, August 12, 1873.  
 Nos. 432, 435, ad. et juv. Tashgam, Dras Valley, August 17, 1873.  
 No. 490. Kharbu, Ladák, August 21, 1873.—Length 6·25 inches, wing 2·3, tail 2·4, tarsus 0·9 ; bill from front 0·55, from gape 0·75. Iris pale brown ; bill horny black, lower mandible paler, yellow at the angles of the mouth. Note “*tick, tick, tick* : ” lives in fields on grass. Native name “Chibi marta.”  
 No. 493. Kharbu, August 21, 1873.  
 No. 550. Leh, August 27, 1873.  
 Nos. 1845, 1850. Kugiár, June 2, 1874.

According to Dr. Stoliczka’s ‘Diary’ this species was not common near Sonámarg in August, but more plentiful apparently near Baltal, though “very difficult to get.”

Colonel Biddulph states that he found this Warbler very common in Ladák, especially about Leh, both coming and going. It frequented the cornfields, at elevations of from 10,000 to 11,000 feet, and was not found near water. It occurred singly, and not in flocks.

The specimen procured by Dr. Scully was only doubtfully referred to his *Acrocephalus macrorhynchus* by Mr. Hume, who was not able at the time to compare it with the type. Mr. Seebohm (Cat. B. v. p. 403) thought it must be *Hypolais rama*, but Mr. Oates has identified it with *T. major* (*cf.* Faun. Brit. Ind., Birds, i. p. 361). Dr. Scully writes :—“I found this bird between Kizil Aghil and Tám, at elevations of from 7000 to 9000 feet, in August. The bird occurred in long grass (called *chigh*) near the Arpalák and Sanju streams ; it seemed to be very restless, continually flitting from blade to blade, and only one specimen was obtained. In Turki it is called ‘Chighchi,’ in allusion to the grass which it frequents.”



Genus **LUSCINIOLA**.146. **LUSCINIOLA MELANOPOGON**.

*Luscinola melanopogon* (Temm.); Seebohm, Cat. B. Brit. Mus. v. p. 132 (1881); C. Swinh. Ibis, 1882, p. 108; Oates, Faun. Brit. Ind., Birds, i. p. 369 (1889).

*Calamodus melanopogon*, Blanford, East. Persia, ii. p. 198 (1876).

No. 1020. Yarkand, December 13, 1873.—Length 6·0 inches, wing 2·6, tail 2·3, tarsus 0·9; expanse 7·6; bill from front 0·4, from gape 0·68; length of foot 1·3. Iris brown; bill horny black; feet black; wings reach within 1·5 inch of end of tail.

Genus **HYPOLAIS**.147. **HYPOLAIS RAMA**.

*Hypolais rama* (Sykes); Blanford, East. Persia, ii. p. 187 (1876); Seebohm, Cat. B. Brit. Mus. v. p. 84 (1881); C. Swinh. Ibis, 1882, p. 108; Scully, J. A. S. Beng. lvi. p. 81 (1887); Oates, Faun. Brit. Ind., Birds, i. p. 391 (1889).

*Phyllopneuste rama* (Sykes); Scully, Str. F. iv. p. 147 (1876).

No. 1702. Yarkand, May 21, 1874.

Nos. 1789, 1791. Yarkand, May 25, 1874. "Got the nest and eggs."

No. 1793. Yarkand, May 26, 1874.

Nos. 1816, 1820, 1821. Kárghalik, May 30, 1874.

On the 27th of May, Dr. Stoliczka wrote in his 'Diary':—"I got two nests of *Hypolais rama*, which is beginning to breed. The nest is made entirely of fine grass, coarser outside, very fine inside, and interwoven with seed-film. It is thick, and about two inches deep, round, with a diameter of 2·0 to 2·2 inches. One nest had five, the other three eggs, all fresh, and the birds were evidently still laying. The eggs are rather roundish, creamy white, with some pale inky spots, and with dark streaks and blotches, more or less confluent, round the thick end. The nests were in gardens, in low vine-bushes, about two feet above the ground. Other birds I saw about high calamus grass, and they must breed there too." Colonel Biddulph shot specimens at Kárghalik on the 30th of May, and at Ighiz Yar on the 19th of May.

Dr. Scully observes:—"H. rama is a seasonal visitant to the plains of Kashgharia, where it breeds. I got the first specimen of it in May, and it was never observed in winter. The Turki name for this Warbler is 'Koktalghu.'"

Genus **SYLVIA**.148. **SYLVIA NISORIA**.

*Sylvia nisoria* (Bechst.); Severtz. Turkest. Jevotn. p. 65 (1873); Dresser, Ibis, 1876, p. 79; Blanford, East. Persia, ii. p. 174 (1876); Seebohm, Cat. B. Brit. Mus. v. p. 6 (1881); Homeyer & Tancré, MT. orn. Ver. Wien, 1883, p. 84; Severtz. Ibis, 1883, p. 67; Sharpe, Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 70 (1889).

*Nisoria undata* (Brehm); Scully, Str. F. iv. p. 149 (1876).

No. 1697. Kizil, May 19, 1874.

Nos. 1735, 1736, 1741, 1743, 1788, 1790, 1795. Yarkand, May 15th to 26th, 1874.

Nos. 1815, 1818, 1823, 1826. Kárghalik, May 30, 1874.

No. 1777. Yarkand, May 23, 1874.—Length 7 inches, wing 3·4, tail 2·8, tarsus 1·05; expanse 10·7; bill from front 0·5, from gape 0·77. Iris sulphur-yellow; bill dark horny above and at tip of lower mandible, pale fleshy at base; wings reach within 1·7 inch of end of tail. “Bulbul” (*Turki*). A beautiful songster, of which I got two nests and saw several others in gardens. Begins to lay about the middle of May.

Under the date of the 24th of May, when the expedition was at Yarkand, Dr. Stoliczka’s ‘Diary’ has the following note:—“Got the nest of the Bulbul: it is very plentiful in the gardens. In one I got three nests with from four to five eggs; in one nest they had nearly fully-developed young; in others the eggs were almost fresh. The nest is on a tree or bush at from four to seven feet above the ground; it is a regular *Sylvia*’s nest, round, regularly cup-shaped, made outside of coarse grass and thin dry twigs, inside of thin grass interwoven with horse-hair. It is  $1\frac{3}{4}$  inch deep, and  $2\frac{3}{4}$  inches in inner diameter, perfectly round. Eggs dirty greenish with dull greenish spots, and rounded, with more confluent dull dark blotches round the thicker end.

Dr. Scully gives a good account of the nesting of this species, which, he says, “arrives about the neighbourhood of Yarkand in May, and probably migrates about September; it is never seen in the country during the winter. It has a beautiful and melodious song, and is hence called by the Yarkandis ‘Bulbul.’”

Colonel Biddulph writes:—“This was not a winter bird, but on our return from the Pámir we found it about Yarkand in May, where it had already commenced to breed. It was very common about Kárgchalik. It is a beautiful songster. It is tame, and comes about habitations. It is a bush- and tree-haunting bird, but it is never seen on the ground.”

#### 149. SYLVIA CINEREA.

*Sylvia cinerea* (Bechst.); Severtz. Turkest. Jevotn. p. 65 (1873); Seebohm, Cat. B. Brit. Mus. v. p. 8 (1881); Bidd. Ibis, 1881, p. 67; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 84; Oates, Faun. Brit. Ind., Birds, i. p. 395 (1889).

*Sylvia rufa*, Bodd.; Dresser, Ibis, 1876, p. 79; Scully, Str. F. 1881, p. 450.

No. 748. Lukung, September 19, 1873.

A young bird fresh moulted into winter plumage.

#### 150. SYLVIA NANA.

*Sylvia nana* (H. & E.); Blanf. East. Persia, ii. p. 178 (1876); Dresser, Ibis, 1876, p. 80; Seebohm, Cat. B. Brit. Mus. v. p. 26 (1881); Sharpe, Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 71 (1889); Oates, Faun. Brit. Ind., Birds, i. p. 396 (1889).

*Atraphornis aralensis* (Eversm.); Severtz. Turkest. Jevotn. pp. 65, 124 (1873); Zarudn. Ois. Transcasp. p. 43 (1885); Menzbier, Ibis, 1885, p. 354.

*Sylvia aralensis*, Prjev. in Rowley’s Orn. Misc. ii. p. 170 (1877).

No. 828. Sháhídúla, October 20, 1873.—Length 5 inches. Iris golden yellow; bill brownish, pale underneath; feet pale yellow with a faint greenish tinge.

#### 151. SYLVIA AFFINIS.

*Sylvia affinis*, Blyth; Wardlaw Ramsay, Ibis, 1880, p. 59; Bidd. Ibis, 1881, p. 67; Scully, t. c. p. 450; Seebohm, Cat. B. Brit. Mus. v. p. 19 (1881); Zarudn. Ois. Transcasp. p. 41 (1885); Scully, J. A. S. Beng. lvi. p. 80 (1887); Oates, Faun. Brit. Ind., Birds, i. p. 397 (1889).

*Sylvia curruca* (nec Linn.) ; Severtz. Turkest. Jevotn. p. 65 (1873) ; Hume & Henders. Lahore to Yark. p. 221 (1873) ; Blauf. East. Persia, ii. p. 175 (1876) ; Prjev. in Rowley's Orn. Misc. ii. p. 170 (1877).

No. 80. Indus Valley, south of Chimray, September 13, 1873.—Length 5·65 inches, wing 2·6, tail 2·45, tarsus 0·78; bill from front 0·3, from gape 0·58. Iris light brown; bill horny black; feet horny blackish.

No. 146, imm. Urumbu, Jhelum Valley, July 24, 1873.

No. 273, juv. Kangan, August 7, 1873.

No. 295. Gaganghir, August 9, 1873.

Nos. 459, 465. Kargil, August 19, 1873.

No. 476. Shargol, August 20, 1873.

Nos. 562, 576. Leh, August 28, 1873.

No. 669, juv. Leh, September 10, 1873.

As mentioned below, Dr. Henderson's specimen from Khushtágh belongs to this species, and therefore the one shot by Dr. Scully at the same place on the 8th of August may also have been an example of this Warbler.

#### 152. SYLVIA MINUSCULA.

*Sylvia curruca* (nec Gm.) ; Scully, Str. F. iv. p. 150 (1876).

*Sylvia minuscule*, Hume; Seeböhm, Cat. B. Brit. Mus. v. p. 20, pl. 1 (1881) ; C. Swinh. Ibis, 1882, p. 109; Severtz. Ibis, 1883, p. 67; Scully, J. A. S. Beng. lvi. p. 80 (1887); Oates, Faun. Brit. Ind., Birds, i. p. 398 (1889); Sharpe, Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 71 (1889).

No. 969. Kárgchalik, November 6, 1873.

No. 1094. Yangihissár, December 1, 1873.

Nos. 1680, 1682. Ighiz Yar, May 18, 1874.

No. 1814. Kárgchalik, May 30, 1874.

Nos. 1840, 1843. Kugiár, June 1, 1874.

Nos. 1848-49. Kugiár, June 2, 1874.

The specimens killed in winter differ little from those obtained in summer, but have rather more brown on the head, which is scarcely different in colour from the back.

Dr. Stoliczka's 'Diary' contains a note that this Warbler was common near Yangihissár in December, and on the 18th of May he found a nest in a rose-bush near Ighiz Yar. On the 31st of May he writes:—"Beshterek. This Warbler is very common and breeding. One nest had one, and another three fresh eggs: one had two half-incubated eggs. The nest is in a small bush about ten inches or a foot above the ground, composed entirely of grass, regularly cup-shaped, round, about  $1\frac{1}{4}$  inch deep and  $1\frac{3}{4}$  in diameter. Outside it consists of moderately coarse grass; inside of finer grass with a little grass-seed film interwoven."

An examination of the specimen procured by Dr. Scully at Posgám in October, and identified by him as *Sylvia curruca*, proves that it is really *S. minuscule*. Whether the other specimens from Khushtágh and Sughuchaw were also of this species I cannot say. Dr. Henderson's specimens in the Hume Collection are also mixed up, one from Oi-tográk being *S. minuscule*, and another from Khushtágh being *S. affinis*.

Dr. Scully states that this Whitethroat arrives in the plains of Kashgharia about April, and migrates southwards towards the end of October. It breeds in May and June.

Genus **PHYLLOSCOPUS**.153. **PHYLLOSCOPUS AFFINIS**.

*Phylloscopus affinis* (Tick.); Seebohm, Cat. B. Brit. Mus. v. p. 65 (1881); Bidd. Ibis, 1881, p. 66; Scully, t. c. p. 449; Oates, Faun. Brit. Ind., Birds, i. p. 401 (1889).

No. 408. Mataian, August 15, 1873.—Length 4·5 inches, wing 2·35, tail 1·7, tarsus 0·8; expanse 6·8; bill from front 0·33, from gape 0·53. Iris brown; bill horny above, yellow below; feet greenish horny brown.

No. 555. Leh, August 28, 1873.

No. 723. Tanksi, September 17, 1873.

No. 753. Lukung, September 19, 1873.

No. 780. Chagra, 14,000 feet, September 21, 1873.

154. **PHYLLOSCOPUS TYTLERI**. (Plate X.)

*Phylloscopus tytleri*, Brooks; Seebohm, Cat. B. Brit. Mus. v. p. 66 (1881); Bidd. Ibis, 1881, p. 66; Oates, Faun. Brit. Ind., Birds, i. p. 402 (1889).

Nos. 309, 330. Sonámarg, August 10, 11, 1873 (*Colonel Biddulph*).

Nos. 381, 385. Baltal, August 12, 1873.

No. 471. Shargol, August 20, 1873.—Bill horny blackish, angle of mouth yellow; feet horny blackish, soles yellow. Length 4·85 inches, wing 2·3, tail 2·0, tarsus 0·72.

155. **PHYLLOSCOPUS TRISTIS**.

*Phylloscopus tristis*, Blyth; Hume & Henders. Lahore to Yark. p. 219 (1873); Blanf. East. Persia, ii. p. 180 (1876); Scully, Str. F. iv. p. 148 (1876); Dresser, Ibis, 1876, p. 82; Wardlaw Ramsay, Ibis, 1880, p. 59; Seebohm, Cat. B. Brit. Mus. v. p. 63 (1881); Bidd. Ibis, 1881, p. 65; Scully, ibid. p. 448; C. Swinhoe, Ibis, 1882, p. 108; Sharpe, Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 71 (1889); Oates, Faun. Brit. Ind., Birds, i. p. 403 (1889).

*Phyllopneuste tristis*, Homeyer & Tancré, MT. orn. Ver. Wien, 1883, p. 84.

*Ficedula fulvescens*, Severtz. Turkest. Jevotn. pp. 65, 126 (1873).

No. 330. Sonámarg, August 11, 1873.

No. 385. Baltal, August 12, 1873.

No. 433. Tashgam, August 17, 1873.

No. 452. Chiliscambo, August 18, 1873.

Nos. 455, 456. Kargil, August 19, 1873.

Nos. 470, 471. Shargol, August 20, 1873.—Length 4·65–4·85 inches, wing 2·15–2·3, tail 1·9–2, tarsus 0·7–0·72. Bill and feet horny blackish; soles and angle of mouth yellow.

Nos. 497, 503, 507. Kharbu, August 21, 22, 1873.

Nos. 545, 546, 549. Leh, August 27, 1873.

Nos. 553, 554, 557, 558, 568, 569, 570. Leh, August 28, 1873.

Nos. 574, 575. Leh, August 29, 1873.

No. 642. Leh, September 6, 1873.

No. 1116. Yangihissár, December 2, 1873.

No. 1405. Ighiz Yar, March 21, 1874.

No. 1655. Pasrobat, May 13, 1874.

Dr. Henderson procured numerous specimens of this species, including a nestling, in Ladák in July. Dr. Scully says that it was very common in August along the Sanju stream and in the Karakásh Valley at elevations of from 9000 to 14,000 feet. Colonel Biddulph also collected a number of specimens near Kargil and Leh.

#### 156. PHYLLOSCOPUS INDICUS.

*Phylloscopus indicus* (Jerd.) ; Wardlaw Ramsay, Ibis, 1880, p. 59 ; Bidd. Ibis, 1881, p. 66 ; Scully, t. c. p. 449 ; Oates, Faun. Brit. Ind., Birds, i. p. 404 (1889).

*Ficedula obscura*, Severtz. Turkest. Jevotn. pp. 65, 124 (1873).

*Luscinola indica*, Seebohm, Cat. B. Brit. Mus. v. p. 126 (1881).

*Phyllopneuste indica*, Homeyer & Tancré, MT. orn. Ver. Wien, 1883, p. 84.

Nos. 391, 420. Mataian, August 14, 15, 1873.

No. 451. Chiliscambo, August 18, 1873.

No. 504. Kharbu, August 22, 1873.

Nos. 611, 615, 627, 637, 643. Leh, September 4-6, 1873.

Nos. 1654, 1657. Pasrobat, May 13, 1874.

No. 1665. Chehil Gumbar, May 14, 1874.

No. 1862. Duba, June 6, 1874.

The young bird is more rufous than the adult, and the yellow is much more vivid below. A young bird in autumn plumage was procured on the 19th of September.

Dr. Stoliczka states that this species was not common near Pasrobat on the 13th of May, and from Chehil Gumbar he writes :—" *P. indicus* prefers feeding about rocks instead of in bushes, as Jerdon observes. It has a peculiar short shrill call." Again, from Duba he observes :—" The call of *P. indicus*, which is common all along, is a deep whistling 'chip-chip,' three or four times repeated. At first the call resembles that of a Kestrel, and is almost as loud."

Colonel Biddulph writes :—" We got a specimen at Leh in September ; we then found it common in the valleys of Kizilyart Mountains, at elevations of from 9000-10,000 feet, in May, on our return from the Pámir. We got it again at Ak-Musjid (5000 feet) in June."

#### 157. PHYLLOSCOPUS FUSCATUS.

*Phylloscopus fuscatus* (Blyth) ; Oates, Faun. Brit. Ind., Birds, i. p. 405 (1889).

*Phyllopneuste fuscata*, Prjev. in Rowley's Orn. Misc. ii. p. 171 (1877).

*Luscinola fuscata*, Seebohm, Cat. B. Brit. Mus. v. p. 127 (1881).

No. 816. Sháhídúla, October 19, 1873.

No. 830. Nubra Valley, October 1873 (*Dr. Bellew*).

#### 158. PHYLLOSCOPUS HUMIL.

*Reguloides viridipennis* (nec Blyth) ; Scully, Str. F. iv. p. 149 (1876).

*Phylloscopus humii* (Brooks) ; Seebohm, Cat. B. Brit. Mus. v. p. 67, pl. iv. fig. 1 (1881) ; Oates, Faun. Brit. Ind., Birds, i. p. 410 (1889).

*Reguloides humii*, Bidd. Ibis, 1881, p. 66 ; Scully, *ibid.* p. 449.

No. 308. Sonámarg, August 10, 1873.

No. 320. Sonámarg, August 11, 1873.—Bill horny above, yellowish below ; feet greenish horny, soles yellow. Length 4·6 inches, wing 2·1, tail 1·6, tarsus 0·75.



No. 379. Baltal, August 12, 1873.

No. 678, ♀. S. of Chimray, Indus Valley, September 13, 1873.—Bill horny brown above; dusky yellow below; feet pale horny; iris brown. Length 4·9 inches, wing 2·3, tail 1·8, tarsus 0·75.

No. 684. S. of Chimray, September 13, 1873.

No. 944. Bora, November 4, 1873.

Nos. 1517, 1520. Panjah, April 14–23, 1874.

No. 1580. Langarkish, April 26, 1874.

No. 1595. Sarikol, May 7, 1874.

Nos. 1684, 1689. S.W. of Ighiz Yar, May 18, 1874.

Nos. 1857, 1860. Duba, June 6, 1874.

The specimen which Dr. Scully procured between Tām and Tadlik on the 17th of August is in very bad condition and has the head shot away. He identified it as *Reguloides viridipennis*, but I think there can be no doubt of its being *P. humii*. On the strength of this specimen Mr. Oates has recorded the species as occurring in Turkestan (Faun. Brit. Ind., Birds, i. p. 419).

#### 159. PHYLLOSCOPUS PROREGULUS.

*Phylloscopus proregulus* (Pall.); Seebohm, Cat. B. Brit. Mus. v. p. 71 (1881); Oates, Faun. Brit. Ind., Birds, i. p. 408 (1889).

*Reguloides proregulus*, Hume & Henders. Lahore to Yark. p. 220 (1873); Prjev. in Rowley's Orn. Misc. ii. p. 172 (1877).

No. 334. Sonámarg, August 11, 1873.

No. 355. Sonámarg, August 12, 1873.—Length 4 inches, wing 2·2, tail 1·6, tarsus 1·65. Iris brown; bill horny brown; feet very pale horny, soles yellowish.

Dr. Henderson obtained a single specimen in the Sind Valley in Kashmir on the 30th of October. Colonel Biddulph shot one at Sonámarg on the 15th of July.

#### 160. PHYLLOSCOPUS SUPERCILIOSUS.

*Phylloscopus superciliosus* (Gm.); Seebohm, Cat. B. Brit. Mus. v. p. 68 (1881); Oates, Faun. Brit. Ind., Birds, i. p. 409 (1889).

*Reguloides superciliosus*, Prjev. in Rowley's Orn. Misc. ii. p. 172 (1877).

*Phyllopneuste superciliosa*, Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 84.

No. 285. Gaganghir, August 9, 1873.

No. 310. Sonámarg, August 10, 1873.

No. 322. Sonámarg, August 11, 1873.—Length 4·5 inches, wing 2·3, tail 1·7, tarsus 0·70; expanse 7, bill from front 0·25, from gape 0·47. Iris brown; bill horny brown; feet greenish, tarsi dark greenish horny, soles greenish white.

No. 382. Baltal, August 12, 1873.

No. 529. Snurla, August 24, 1873.

No. 724. Tanksi, September 17, 1873.

No. 820. Sháhidúla, October 19, 1873.

No. 860. Gidjik, October 24, 1873.

Colonel Biddulph states that he procured this species at Panjah in Wakhán in April, at Aktala in May, and at Duba on the 6th of June.

Dr. Stoliczka found the species very common in the Duba Valley on the 6th of June, but it was then only pairing, and he supposed it would not lay before the end of June.

Genus **ACANTHOPNEUSTE.**

161. **ACANTHOPNEUSTE VIRIDANA.**

*Acanthopneuste viridanus* (Blyth) ; Oates, Faun. Brit. Ind., Birds, i. p. 414 (1889).

*Phylloscopus viridanus*, Hume & Henders. Lahore to Yark. p. 220, pl. xix. (1873) ; Scully, Str. F. iv. p. 148 (1876) ; Wardlaw Ramsay, Ibis, 1880, p. 59 ; Seebohm, Cat. B. Brit. Mus. v. p. 44 (1881) ; Bidd. Ibis, 1881, p. 66 ; Scully, ibid. p. 448 ; Severtz. Ibis, 1883, p. 67.

*Phyllopneuste viridana*, Homeyer & Tancré, MT. orn. Ver. Wien, 1883, p. 84.

No. 362. Sonámarg, August 8, 1873.

No. 380. Baltal, August 12, 1878.

No. 457. Kargil, August 19, 1873.

No. 628. Leh, September 4, 1873.

No. 861. Gidjik, N. of Sanju Pass, October 24, 1873.

This species, according to Dr. Henderson, was common in Hill Yarkand, at the Arpalik River, in August. Dr. Scully says that he observed it among the tamarisk and willow bushes fringing the Sanju stream, and along the banks of the Karakash River.

162. **ACANTHOPNEUSTE OCCIPITALIS.**

*Acanthopneuste occipitalis* (Jerd.) ; Oates, Faun. Brit. Ind., Birds, i. p. 418 (1889).

*Phylloscopus occipitalis*, Seebohm, Cat. B. Brit. Mus. v. p. 50 (1881).

*Reguloides occipitalis*, Biddulph, Ibis, 1881, p. 66 ; Scully, t. c. p. 449.

No. 35. Murree, June 25, 1873.

Nos. 48, 49. Murree, June 26, 1873.

No. 87. Changligally, July 3, 1873.

No. 281, ♀. Gond, August 8, 1873.—Length 4·8 inches, wing 2·6, tail 1·9, tarsus 0·35 ; bill from front 0·35, from gape 0·56. Iris dark brown ; bill brown, yellow on lower mandible ; feet leaden grey.

Nos. 290, 297. Gaganghir, August 9, 1873.

No. 311. Sonámarg, August 10, 1873.

No. 363. Sonámarg, August 12, 1873.

No. 387. Baltal, August 12, 1873.

Colonel Biddulph notes this species from Sonámarg in July, and in the Jhelum Valley in August.

Genus **CRYPTOLOPHA.**

163. **CRYPTOLOPHA XANTHOSCHISTA.**

*Abornis xanthoschistus* (Hodgs.) ; Hume & Henders. Lahore to Yark. p. 220, pl. 20. fig. 1 (1873).

*Cryptolopha xanthoschista*, Sharpe, Cat. B. Brit. Mus. iv. p. 398 (1879, pt.) ; Oates, Faun. Brit. Ind., Birds, i. p. 425 (1889).

Found by Dr. Henderson to be very common in Kashmir in May and October. Colonel Biddulph obtained a specimen at Baramula in July.

Genus **HORORNIS**.

164. **HORORNIS PALLIDUS**.

*Horornis pallidus* (Brooks) ; Oates, Faun. Brit. Ind., Birds, i. p. 436 (1889).

*Cettia fortipes* (Hodgs.) ; Seebohm, Cat. B. Brit. Mus. v. p. 136 (1881, pt.).

No. 155. Urumbu, July 24, 1873 (*Colonel Biddulph*).

Nos. 288, 294, 296. Gaganghir, August 9, 1873.

In his 'Diary,' Dr. Stoliczka notes that he found this species plentiful at Gond, but difficult to procure; he shot several specimens at Gaganghir; he says that it "sits near the tops of trees in the morning." He adds:—"No *H. pallidus* is seen from a little above Gaganghir. Its whistle is very peculiar and loud for the size of the bird."

Genus **CETTIA**.

165. **CETTIA ORIENTALIS**. (Plate XI.)

*Cettia orientalis*, Tristr. Ibis, 1867, p. 79.

*Cettia albiventris*, Severtz. Turkest. Jevotn. pp. 66, 131 (1873).

*Cettia scalenura*, Severtz. Turkest. Jevotn. pp. 66, 131 (1873).

*Bradyptetes cetti* (nec Marm.) ; Blanf. East. Persia, ii. p. 200 (1876).

*Cettia cetti* (nec Marm.) ; Seebohm, Cat. B. Brit. Mus. v. p. 135 (1881) ; C. Swinh. Ibis, 1882, p. 108 ; Scully, J. A. S. Beng. lvi. p. 81 (1887).

*Cettia orientalis*, Tristr. ; Oates, Faun. Brit. Ind., Birds, i. p. 441 (1889).

No. 998. Yarkand, November 11, 1873.—Length 6·3 inches, wing 2·75, tail 2·8, tarsus 0·9 ; expanse 8·15 ; bill from front 0·44, from gape 0·66. Iris brown ; bill horny brown, lower mandible fleshy brown ; feet whitish fleshy.

No. 1088. Yarkand, November 28, 1873.

Mr. Seebohm has united this species to the *Cettia cetti* of Europe, but it is undoubtedly a paler race, though probably only subspecifically separable. I follow Mr. Oates in keeping it distinct from the true *C. cetti*.

Genus **SUYA**.

166. **SUYA CRINIGERA**.

*Suya crinigera*, Hodgs. ; Sharpe, Cat. B. Brit. Mus. vii. p. 177 (1883) ; Oates, Faun. Brit. Ind., Birds, i. p. 444 (1889).

Colonel Biddulph obtained this species at Dhunna, three marches east of Murree, on the 5th of August, and again at Chikar on the 7th of the same month.

Genus **RHOPOPHILUS**.

167. **RHOPOPHILUS ALBOSUPERCILIARIS**.

*Suya albosuperciliaris*, Hume ; Hume & Henders. Lahore to Yark. p. 218, pl. xviii. (1873) ; Scully, Str. F. iv. p. 147 (1876).

No. 940, ♂. Sanju, November 1, 1873.—Length 8 inches, wing 2·7, tail 4·2, tarsus 1·1; expanse 8·3; bill from front 0·5, from gape 0·73. Iris brown; bill horny brown, lower mandible pale; feet fleshy grey.

No. 947. Sanju, November 1, 1873.

Nos. 940, 958. Oi-tográk, November 4, 1873.

Nos. 1243, 1244, 1253. Marálbáshi, January 1874.

No. 1368. Aioksogon, February 19, 1874.

In all these specimens the white supercilium and the black moustache are, the former almost wholly, the latter to a great extent, obsolete. The whole colouring is more sandy than in the type, and the marking of the surface wanting. Colonel Biddulph's note is as follows:—"This species I only saw at Sanju at one place, but between Sanju and Kárgchalik and again at Marálbáshi it was very common. In all these localities it was found amongst long grass."

Dr. Stoliczka in his 'Diary' remarks that on leaving Oi-tográk on the 4th of November he obtained several *Suya albosuperciliaris*; they were, as usual, very difficult to shoot. At Aioksogon, on the 19th of February, this species was common among the high grass. Colonel Biddulph procured specimens at Sanju on the 1st of November, and several at Marálbáshi in January.

Dr. Henderson writes:—"A single specimen of this remarkable bird was obtained on the 10th of September on the Yarkand plains at Khushtágh, an oasis in the desert, where a few fields of peas, barley, and wheat fringe for a breadth of a few hundred yards a small stream that further on loses itself in the desert. For a distance of from twelve to twenty miles in either direction an absolute desert of shifting sand and gravel stretches away to the horizon. Numerous small birds frequented these isolated fields, where the Common Swallow, too, was particularly numerous, but of the species now under consideration only a single individual, a female, was procured."

"This species," writes Dr. Scully, "is tolerably common in the plains of Eastern Turkestan, where it is said to be a permanent resident. It has a sweet plaintive note, and frequents long grass and bushes growing near rivers and streams. It breeds in May and June: some young birds were obtained about the middle of the latter month. The Turki name for the species is 'Suram.'"

#### Family TURDIDÆ.

##### Subfamily SAXICOLINÆ.

##### Genus PRATINCOLA.

#### 168. PRATINCOLA CAPRATA.

*Pratincola caprata* (L.); C. Swinh. Ibis, 1882, p. 106; Sharpe, Cat. B. Brit. Mus. iv. p. 195 (1879, pt.); id. Trans. Linn. Soc. (2) Zool. v. p. 70 (1889); Oates, Faun. Brit. Ind., Birds, ii. p. 59 (1890).

No. 141, ♀ ad. Hatti, July 21, 1873.

#### 169. PRATINCOLA MAURA.

*Pratincola rubicola* (nec Linn.); Hume & Henders. Lahore to Yark. p. 204 (1873).

*Pratincola indica*, Blyth; Prjev. in Rowley's Orn. Misc. ii. p. 185 (1877); Bidd. Ibis, 1881, p. 54;

Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 85; Severtz. Ibis, 1883, p. 70; Zarudn. Ois. Transcasp. p. 39 (1885).

*Pratincola maura* (Pall.) ; Sharpe, Cat. B. Brit. Mus. iv. p. 188 (1879); Wardlaw Ramsay, Ibis, 1880, p. 55; Oates, Faun. Brit. Ind., Birds, ii. p. 61 (1890).

Nos. 44, 47, ♂ ♀ ad. Murree, June 26, 1873.

No. 75, ♂ ad. Murree, July 2, 1873.

Nos. 98-101, ♂ ♀ ad. et juv. Changligally, July 6, 1873.

No. 201, juv. Srinagar, July 29, 1873.

Nos. 272, 274, ♂ ad. Kangan, August 7, 1873.

No. 280, juv. Gond, August 8, 1873.

No. 377, ♂ ad. Sonámarg, August 12, 1873.

Nos. 1492, 1494, ♂ ♀ ad. Panjah, April 14-23, 1873.

No. 1675, ♂ ad. Ighiz Yar, May 18, 1874.

Colonel Biddulph procured a pair at Panjah on the 21st of April. On the 17th, Dr. Stoliczka in his 'Diary' states that he saw a pair at the above-mentioned place on the 17th of April, which were the first he observed travelling up. On the 18th he saw another. At Ighiz Yar this species was very common on the 18th of May, and he found it breeding in the Duba Valley on the 6th of June. Dr. Henderson says that it was found throughout Kashmir and in Yarkand, on the banks of the Karakásh River, and wherever there was grass and low jungle, but not otherwise.

#### Genus **SAXICOLA.**

##### 170. **SAXICOLA PICATA.**

*Saxicola picata*, Blyth; Blanf. East. Persia, ii. p. 153 (1876); Wardlaw Ramsay, Ibis, 1880, p. 57; Barnes, Str. F. ix. p. p. 217 (1880); Seebohm, Cat. B. Brit. Mus. v. p. 367 (1881); Bidd. Ibis, 1881, p. 56; Scully, t. c. p. 441; Bidd. Ibis, 1882, p. 276; C. Swinh. t. c. p. 106; Zarudn. Ois. Transcasp. p. 38 (1885); Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 74 (1889); Oates, Faun. Brit. Ind., Birds, ii. p. 71 (1890).

No. 458. Kargil, August 19, 1873.

##### 171. **SAXICOLA PLESCHANKA.**

*Saxicola leucomela* (Pall.) ; Severtz. Turkest. Jevotn. p. 65 (1873).

*Saxicola hendersoni*, Hume, Ibis, 1871, p. 408; id. & Henders. Lahore to Yark. p. 206, pl. 13 (1873); Scully, Str. F. iv. p. 144 (1876); Bidd. Ibis, 1881, p. 61.

*Saxicola morio*, H. & E.; Dresser, Ibis, 1875, p. 336; Blanf. East. Persia, ii. p. 152 (1876); Prjev. in Rowley's Orn. Misc. ii. p. 183 (1877); Wardlaw Ramsay, Ibis, 1880, p. 57; Seebohm, Cat. B. Brit. Mus. v. p. 372 (1881); Bidd. Ibis, 1881, p. 58; Scully, t. c. p. 443; Bidd. Ibis, 1882, p. 276; C. Swinh. t. c. p. 107; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 85; Severtz. Ibis, 1883, p. 69; Scully, J. A. S. Beng. lvi. p. 82 (1887); Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 74 (1889).

*Saxicola pleschanka* (Lepesch.) ; Oates, Faun. Brit. Ind., Birds, ii. p. 73 (1890).

No. 462. Kargil, August 19, 1873.

No. 475 [juv.]. Shargol, August 20, 1873.

Nos. 1673, 1679, 1686, 1690 [♂ ad.]. South-west of Ighiz Yar, May 18, 1874.

No. 1679 still bears abundant traces of the brown tips to the dorsal feathers,



which are characteristic of winter plumage. On this specimen Dr. Severtzow has written:—" *Saxicola talas*, Sev. = ? *S. morio*, 2nd nest, 1st year," meaning that its backward plumage is due to its having been a late-bred bird of the previous year.

Dr. Stoliczka says in his 'Diary' that this Chat was very common at Ighiz Yar on the 18th of May. Colonel Biddulph procured a male at Kila Panj on the 12th of April, 1874, and he noticed the species in the Karakásh Valley. Dr. Henderson found it on the Arpalák River near Sanju, and at Khushtágh, twenty miles further north. Dr. Scully writes:—"This species was found in September in the plains of Kashgharia, at an elevation of about 6100 feet. It was met with on the desert oases of Sulikaziz Langar and Khushtágh, running about in suitable fields, where it was tolerably numerous. The Yarkandis, who know the bird well, say that it breeds in the country, and disappears entirely in the winter. The Turki name is 'Kara Chiket,' 'Black Wheatear.'"

#### 172. SAXICOLA CENANTHE.

*Saxicola cenanthe* (L.); Severtz. Turkest. Jevotn. p. 65 (1873); Dresser, Ibis, 1875, p. 333; Blanf. East. Persia, ii. p. 146 (1876); Prjev. in Rowley's Orn. Misc. ii. p. 183 (1877); Bidd. Ibis, 1881, p. 60; Scully, t. c. p. 444; Seebohm, Cat. B. Brit. Mus. v. p. 391 (1881); Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 85; Zarudn. Ois. Transcasp. p. 37 (1885); Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 75 (1889).

Nos. 1455, 1456 [ ♂ ♀ ]. Pámir Kul, April 5, 1874.

No. 1475 [ ♂ ]. Panjah, April 16, 1874.—Length 6·5 inches, wing 3·82, tail 2·2, tarsus 1·15. Iris brown; bill and feet black.

Nos. 1487 [ ♀ ], 1488, 1489 [ ♂ ♀ ]. Panjah, April 14–23, 1874.

No. 1496 [ ♀ ]. Panjah, April 14–23, 1874.

Nos. 1506, 1512 [ ♂ ], 1549 [ ♀ ]. Panjah, April 14–23, 1874.

No. 1742, ♂ pull. Yarkand, May 15, 1874.

No. 1784 [ ♀ ]. Yarkand, May 28, 1874.

Dr. Stoliczka found the Wheatear very common at Ighiz Yar on the 18th of May, and it was breeding in the Duba Valley early in June.

#### 173. SAXICOLA ISABELLINA.

*Saxicola squalida*, Eversm.; Severtz. Turkest. Jevotn. p. 65 (1873).

*Saxicola saltator*, Ménétr.; Severtz. t. c. p. 65.

*Saxicola isabellina*, Cretzschm.; Dresser, Ibis, 1875, p. 335; Blanf. East. Persia, ii. p. 147 (1876); Scully, Str. F. iv. p. 142 (1876); Prjev. in Rowley's Orn. Misc. ii. p. 184 (1877); Seebohm, Cat. B. Brit. Mus. v. p. 399 (1881); Bidd. Ibis, 1881, p. 60; Scully, ibid. p. 444; C. Swinh. Ibis, 1882, p. 107; Severtz. Ibis, 1883, p. 68; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 85; Zarudn. Ois. Transcasp. p. 38 (1885); Scully, J. A. S. Beng. lvi. p. 82 (1887); Oates, Faun. Brit. Ind., Birds, ii. p. 77 (1890).

No. 1510. Panjah, April 14–23, 1874.

No. 1587. Sirikul Lake, May 1, 1874.

Colonel Biddulph procured specimens at Kizil on the 19th of May, and at Posgám on the 29th of the same month. It was only seen in summer in the plains of Turkestan.

Dr. Scully writes:—"This species was common in the plains of Eastern Turkestan, at elevations of from 4000 to 6300 feet, from the middle of April to the middle of August; it was never met with during the winter, nor in the hills at any season. It probably arrives in the country towards the end of March, and leaves certainly not later than October. The bird

frequents waste ground, usually on the borders of cultivation, and at Besharik and Bora in August it was found associated with *Saxicola deserti*. In the neighbourhood of Yarkand it breeds in April and May; three quite young birds were obtained there during the latter month. The Turki name for all Wheatears is *Chikit*, a word having some reference to the black-and-white tail; the present species is distinguished as *Boz chikit*, *i. e.* 'the Grey Wheatear.' "

#### 174. SAXICOLA DESERTI.

*Saxicola atrogularis*, Blyth; Hume & Henders. Lahore to Yark. p. 205 (1873).

*Saxicola deserti*, T.; Dresser, Ibis, 1875, p. 337; Scully, Str. F. iv. p. 143 (1876); Blanf. East. Persia, ii. p. 148 (1876); Wardlaw Ramsay, Ibis, 1880, p. 57; Seebohm, Cat. B. Brit. Mus. v. p. 383 (1881); C. Swinh. Ibis, 1882, p. 107; Severtz. Ibis, 1883, p. 69; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 85; Scully, J. A. S. Beng. lvi. p. 82 (1877); Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 74 (1889); Oates, Faun. Brit. Ind., Birds, ii. p. 78 (1890).

*Saxicola solina*, Eversm.; Severtz. Turkest. Jevotn. p. 65 (1873); id. Str. F. iii. p. 429 (1875).

No. 811. North of Suget Pass, October 16, 1873.

"The Black-throated Wheatear," writes Dr. Henderson, "was common in Ladák, from Kharbu to Leh, and, indeed, almost to the Pangong Lake, and again in the Lower Karakásh Valley and the plains of Yarkand. A nestling was obtained on the 5th of August at Balakchi, on the Karakásh, showing that the bird breeds in this neighbourhood."

Dr. Scully states that "this species was common in the plains of Kashgharia at elevations of 4500 feet and upwards, and in some portions of the hills up to an elevation of 12,300 feet. It was never observed during the winter. In the plains it was found in the desert ground between Sanju and Kárghalik, hopping among the little sand-banks, and it was common between Sháhidúla and Gulgun Shah in the Karakásh Valley. It probably breeds in the localities mentioned during the months of June and July. The Turki name for this species is "Ala Chikit," the "Variegated Wheatear."

Dr. Stoliczka says that it breeds in the Duba Valley.

#### 175. SAXICOLA MONTANA.

*Saxicola deserti*, pt. (nec Cretzschm.); Blanf. East. Persia, ii. p. 148 (1876).

*Saxicola montana*, Gould; Seebohm, Cat. B. Brit. Mus. v. p. 384 (1881); Zarudn. Ois. Transcasp. p. 38 (1885); St. John, Ibis, 1889, p. 164; Oates, Faun. Brit. Ind., Birds, ii. p. 78 (1890).

Nos. 498, 511 [♂ ♀ moulting]. Kharbu, August 21, 1873.

No. 541 [♂ moulting]. Snimu, August 26, 1873.

No. 549 [♂ moulting]. Leh, August 27, 1873.

No. 688 [♂]. Zingral, South of Chang-la, 15,000 feet, September 14, 1873.—Total length 6.65 inches, wing 4.0, tail 2.9, tarsus 1.0. Iris blackish brown; bill and feet black.

No. 693 [♂]. Tsúltak, north of Chang-la, 15,500 feet, September 15, 1873.

Nos. 1490, 1505, 1522 [♂ ad.]. Panjah, April 14, 1874.

No. 1476 [♂]. Panjah, April 16, 1874.—Length 6.85 inches, wing 4.0, tail 2.7, tarsus 1.04. Iris dark brown; bill and feet black.

No. 1681 [♀]. South-west of Ighiz Yar, May 18, 1874.

No. 1819 [♀]. Kárghalik, May 30, 1874.

No. 1842 [♂]. Kugiár, June 1, 1874.

Dr. Stoliczka remarks that this species (which he at first mistook for *S. deserti*) had young in August when he was at Kharbu. At Tsúltak he says it was "very common, and evidently

migrating down." At Ak Masjid it was breeding, but he could not get the eggs. Colonel Biddulph says that it was met with everywhere in spring, summer, and autumn beyond the Zoji-la, but was not seen during the winter in the plains of Turkestan.

176. *SAXICOLA CHRYSOPYGIA*.

*Saxicola chrysopygia* (De Fil.) ; Blanf. East. Persia, ii. p. 151, pl. 10. fig. 1 (1876) ; Seebohm, Cat. B. Brit. Mus. v. p. 389 (1881) ; Oates, Faun. Brit. Ind., Birds, ii. p. 79 (1890).

*Saxicola kingi*, Hume, Ibis, 1871, p. 29.

No. 1458. Panjah, April 13, 1874.—Bill black ; feet black ; iris brown. Total length 7·0 inches, wing 3·82, tail 2·6, tarsus 1·06.

No. 1500. Panjah, April 14–23, 1874.

Subfamily *RUTICILLINÆ*.

Genus **HENICURUS**.

177. *HENICURUS MACULATUS*.

*Henicurus maculatus* (Vig.) ; Hume & Henders. Lahore to Yark. p. 222 (1873) ; Sharpe, Cat. B. Brit. Mus. vii. p. 317 (1883) ; Oates, Faun. Brit. Ind., Birds, ii. p. 83 (1890).

No. 60, juv. Murree, June 29, 1873.

Dr. Henderson met with this species at Púñch on the road down from Kashmir to Lahore.

Genus **CHÆMORRHORNIS**.

178. *CHÆMORRHORNIS LEUCOCEPHALA*.

*Chæmorrhornis leucocephala* (Vig.) ; Hume & Henders. Lahore to Yark. p. 214 (1873) ; Prjev. in Rowley's Orn. Misc. ii. p. 178 (1877).

*Chimarrhornis leucocephala*, Sharpe, Cat. B. Brit. Mus. vii. p. 47 (1883) ; Oates, Faun. Brit. Ind., Birds, ii. p. 89 (1890).

No. 312, juv. Sonámarg, August 10, 1873.

No. 342, adult. Sonámarg, August 11, 1873.

Procured by Dr. Henderson in the neighbourhood of Púñch. Colonel Biddulph informs us that it was very common in the Sind Valley in July and in Ladák between Kargil and the Zoji-la.

Genus **RUTICILLA**.

179. *RUTICILLA FRONTALIS*.

*Ruticilla frontalis* (Vig.) ; Hume & Henders. Lahore to Yark. p. 211 (1873) ; Bidd. Ibis, 1881, p. 63 ; Scully, t. c. p. 446 ; Seebohm, Cat. B. Brit. Mus. v. p. 349 (1881) ; Oates, Faun. Brit. Ind., Birds, ii. p. 91 (1890).

Dr. Henderson found this species very common in Kashmir, but only on the return journey.

180. *RUTICILLA ERYTHRONOTA*.

*Ruticilla erythronota* (Eversm.) ; Severtz. Turkest. Jevotn. p. 65 (1873) ; Dresser, Ibis, 1876, p. 77 ; Blanf. East. Persia, ii. p. 167 (1876) ; Bidd. Ibis, 1881, p. 62 ; Scully, t. c. p. 445 ; Seebohm,

Cat. B. Brit. Mus. v. p. 348 (1881); C. Swinh. Ibis, 1882, p. 107; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 85; Scully, J. A. S. Beng. lvi. p. 82 (1890); Oates, Faun. Brit. Ind., Birds, ii. p. 84 (1890).

- No. 849, ♂. North of Sháhídúla, October 21, 1873.  
 No. 886, ♂. Sanju, October 27, 1873.  
 No. 918, ♀. Sanju, November 1, 1873.—Length 6·6 inches, wing 3·3, tail 2·7, tarsus 0·93.  
 Iris brown; bill and feet black.  
 Nos. 1102, 1110, 1113, 1114, ♂. Yangihissar, December 1, 2, 1873.  
 Nos. 1232, 1251, ♂. Marálbáshi, January 1874.  
 Nos. 1290, 1298, 1346, ad. Kashghar, February 2–12, 1874.  
 No. 1377, ♂. Jigda, February 26, 1874.  
 No. 1425. Tarbashi, March 27, 1874.  
 No. 1452. Kanshubar, April 2, 1874.

Colonel Biddulph writes:—"I saw this species first in the Karakásh Valley below Sháhídúla; again in small numbers all over the plains of Turkestan during the winter. I also shot one going up to Sarikol, but I do not remember ever seeing it in Wakhán or in Yarkand during the summer."

181. *RUTICILLA RUFIVENTRIS*.

*Ruticilla erythroprocta* (nec Gould); Severtz. Turkest. Jevotn. p. 65 (1873); Hume & Henders. Lahore to Yark. p. 208 (1873).

*Ruticilla semirufa* (nec Ehr.) ; Dresser, Ibis, 1876, p. 77.

*Ruticilla rufiventris*, V. ; Blanf. East. Persia, ii. p. 163 (1876); Scully, Str. F. iv. p. 144 (1876); Wardlaw Ramsay, Ibis, 1880, p. 57; Bidd. Ibis, 1881, p. 61; Scully, t. c. p. 445; Seebohm, Cat. B. Brit. Mus. v. p. 342 (1881); C. Swinh. Ibis, 1882, p. 107; Severtz. Ibis, 1883, p. 68; Zarudn. Ois. Transcasp. p. 37 (1885); Scully, J. A. S. Beng. lvi. p. 82 (1887); Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 73 (1889); Oates, Faun. Brit. Ind., Birds, ii. p. 95 (1890).

- Nos. 396, 398, ♂ juv. Mataian, August 14, 1873.  
 No. 411, ♂ ad. Mataian, August 15, 1873.—Length 6·0 inches, wing 3·5, tail 2·35, tarsus 0·95; bill from front 0·45, from gape 0·7. Iris brown; bill black; feet horny black.  
 Nos. 417, 418, ♀ juv. Mataian, August 15, 1873.  
 No. 422, ♂. Drás, August 16, 1873.  
 No. 528, juv. Snurla, August 24, 1873.  
 No. 533, ♂ ad. Saspúl, on the Indus, Ladák, August 25, 1873.  
 Nos. 577, 608, ♂ ad. et juv. Leh, August 29, 1873.  
 Nos. 636, 647, ♂ ad. Leh, September 5–7, 1873.  
 Nos. 815, 913, ♀ ad. et juv. Sháhídúla, October 12–22, 1873.  
 No. 1473, ♂ ad. Panjah, April 16, 1874.—Length 6·25 inches, wing 3·38, tail 2·7, tarsus 0·94; expanse 10·2; bill from front 0·4, from gape 0·7; length of foot 1·2, spread of foot 0·9; middle toe 0·7, hind toe 0·5; wings reach within 0·9 of end of tail.  
 Iris brown; bill black; feet black, soles yellowish.  
 Nos. 1507, 1513, 1504, ♂. Panjah, April 14–23, 1874.  
 No. 1592, ♂. Aktásh, May 5, 1874.  
 Nos. 1658, ♂, 1661, ♀. Pasrobat, May 13, 1874.  
 No. 1663, ♂. Chehil Gumbar, May 14, 1874.

Nos. 1676, ♀, 1691, ♂. S.W. of Ighiz Yar, May 18, 1874.

No. 1701, ♀. Yarkand, May 21, 1874.

Nos. 1841, 1847, ♂ ♀. Kugiár, June 1, 1874.

Dr. Stoliczka calls this the commonest bird near Drás. Dr. Henderson states that numbers of specimens were met with from Leh up to the Pangong Lake, and again in Yarkand at the foot of the hills. Colonel Biddulph states that it was very common in Ladák and again in Wakhán, but he did not observe it in Turkestan. Dr. Scully, however, writes:—"This species was observed in great numbers in August frequenting mountain-streams at elevations of from 7000 to 8000 feet. It was very common along the course of the Arpalák River, hopping about among the stones and bushes and moving its tail incessantly." He believes that it breeds in Eastern Turkestan. Dr. Stoliczka mentions that on two occasions he shot a male bird in the plumage of the female.

## 182. RUTICILLA ERYTHROGASTER.

*Ruticilla erythrogastra* (Güld.); Hume & Henders. Lahore to Yark. p. 210 (1873); Severtz. Turkest. Jevotn. p. 65 (1873); Dresser, Ibis, 1876, p. 77; Scully, Str. F. iv. p. 144 (1876); Prjev. in Rowley's Orn. Misc. ii. p. 177 (1877); Bidd. Ibis, 1881, p. 63; Scully, ibid. p. 445; Severtz. Ibis, 1883, p. 68; Seebohm, Cat. B. Brit. Mus. v. p. 347 (1881); Homeyer & Tancré, MT. orn. Ver. Wien, 1883, p. 85; Menzbier, Ibis, 1885, p. 356; Radde, Ornith., iii. p. 487 (1887).

*Ruticilla erythrogaster*, Oates, Faun. Brit. Ind., Birds, ii. p. 97 (1890).

No. 584, juv. Leh, August 30, 1873.—Length 7·3 inches, wing 4·15, tail 3·1, tarsus 1·17; expanse 12·25; bill from front 0·45, from gape 0·8; length of foot 1·4. Iris brown; bill black; feet black.

No. 694, ♂ juv. Tsúltak, September 15, 1873.

Nos. 707, 710, ♂. Tanksi, September 16, 1873.

Nos. 742. Tanksi, September 18, 1873.

Nos. 761, 762. Lukung, on the Pangong Lake, September 20, 1873.

Nos. 831, 850, 851, ♂ ♀. Sháhidúla, October 21, 1873.

Nos. 1357, 1358, ♂. Altin Artish, February 16, 1874.

No. 1378, ♀. Faizabad, March 2, 1874.

No. 1409, ♀. Aktala, March 22, 1874.

No. 1441, ♂. Tashkúrghán, March 30, 1874.

No. 1497, ♂. Panjah, April 14-23, 1874.

No. 1601, ♀. Sarikol, May 9, 1874.—"Eggs very small yet."

No. 1662, ♂. Pasrobat, May 13, 1874.

No. 1747, ♂. Yarkand, May 15-20, 1874.

The differences in the colour between the summer and the winter plumages is very noticeable in a series of specimens like the above, the red tint being in the summer-killed specimens much paler, while in the winter-killed individuals the breast, lower back, rump, and tail are deep vinous chestnut. The black of the back becomes more intense, and the head purer white in summer.

Dr. Stoliczka's 'Diary' informs us that this Redstart was common near Tanksi on the 16th of September, and again near Aktala on the 22nd of March. On the 15th of April he again notes the species as very common near Panjah, but at that date there was no evidence of its nesting. Colonel Biddulph records it from several places—Muglib in Ladák, 13,400 feet, on



the 16th of September, Karakásh Valley on the 15th of October, Kirog Valley on the way up to the Pámir on the 24th of March, and Aktásh on the 4th of April.

Dr. Henderson writes:—"This handsome Redstart was met with all through Ladák, both in going and returning, and was especially abundant on the return journey in October. It was found as high as 17,800 feet on the snow in the Chang Pass, and again on the other side of the plateau it was observed in Yarkand, from about 15,000 feet to the foot of the hills, but not in the plains."

Dr. Scully gives the following note:—"This Redstart was very common during the months of August and September in the mountains, at elevations of from 10,000 to 18,000 feet, but was never met with in the plains of Eastern Turkestan. It frequents the neighbourhood of streams generally, hopping about on the stones and amongst the small bushes. The Kirghis at Kichik Yailak say that this bird breeds during the months of June and July, in the high mountains near their encampment, and their name for it is 'Kizil Kurganak,' i. e. 'Red Kestrel'!"

Colonel Biddulph has forwarded the following note:—"I first found this Redstart at Leh, and all the way to the Pangong Lake, up to an altitude of 14,000 feet, in September. Afterwards I met with it in the valley of the Karakásh, and again on going up to the Pámir, and in Wakhán, but not in the plains of Turkestan. We found them generally in rocky ground, more or less covered with bushes, on which they often perched. I did not observe that they had any predilection for water."

Genus **RHYACORNIS.**

183. **RHYACORNIS FULIGINOSA.**

*Ruticilla fuliginosa* (Vig.); Hume & Henders. Lahore to Yark. p. 212, pl. xv. (1873); Prjev. in Rowley's Orn. Misc. ii. p. 177 (1877).

*Rhyacornis fuliginosa*, Oates, Faun. Brit. Ind., Birds, ii. p. 98 (1890).

Dr. Henderson procured this species at Púneh, below the Haji Pir Pass, on the way down from Kashmir.

Genus **CYANECULA.**

184. **CYANECULA CÆRULECULA.**

*Lusciola suecica*, Severtz. Turkest. Jevotn. p. 65 (1873).

*Cyanecula suecica* (nec L.); Hume & Henders. Lahore to Yark. p. 214 (1873); Dresser, Ibis, 1875, p. 341; Blanf. East. Persia, ii. p. 169 (1876); Scully, Str. F. iv. p. 145 (1876); Wardlaw Ramsay, Ibis, 1880, p. 58; Bidd. Ibis, 1881, p. 65; Scully, t. c. p. 447; C. Swinh. Ibis, 1882, p. 108; Severtz. Ibis, 1883, p. 68; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 84; Scully, J. A. S. Beng. lvi. p. 82 (1887); Oates, Faun. Brit. Ind., Birds, ii. p. 99 (1889).

*Erythacus cæruleculus* (Pall.); Seebohm, Cat. B. Brit. Mus. v. p. 308 (1881); Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 73 (1889).

*Cyanecula cærulecula*, Prjev. in Rowley's Orn. Misc. ii. p. 180 (1877); Zarudn. Ois. Transcasp. p. 37 (1885).

No. 489, ♂. Kharbu, Ladák, August 21, 1873.—Length 6 inches, wing 2·9, tail 2·25, tarsus 1·1; expanse 9; bill from front 0·4, from gape 0·7; length of foot 1·45. Bill black; feet horny black.

No. 495. Kharbu, August 21, 1873.

Nos. 572, 573. Leh, August 29, 1873.

No. 602. Leh, August 31, 1873.

No. 762. Leh, September 10, 1873.

No. 938. Sanju, October 31, 1873.

No. 1472. Panjah, April 16, 1874.—Length 5·8 inches, wing 2·75, tarsus 1·16; expanse 8·7; bill from front 0·4, from gape 0·7; length of foot 1·4, spread of foot 1. Iris brown; bill horny black; feet dark brown, tarsi a little paler, soles yellow; middle toe 0·73, hind toe 0·58; wings reach within 1·3 of end of tail.

Nos. 1805, 1811, 1812. Kárgchalik, May 29, 1874.

No. 1838. N. of Kugiár, June 1, 1874.

Dr. Stoliczka states in his 'Diary' that this species was very common along the road near Karghalik on the 29th of May, and he saw a pair carrying grass for their nest. Colonel Biddulph says that it was seen in great numbers in September, from Leh to the Pangong Lake, and on the return journey it was plentiful in June and July in the Indus and Nubra valleys. Dr. Henderson obtained it on the "Khush Maidán or Happy Plain" (so-called on the *lucus a non lucendo* principle, it being one of the most miserable deserts in creation) at an elevation of 16,000 feet; at Sháhídúla at about 11,000 feet; and at Sanju, about 6000 feet, where, by the way, one quite young bird was obtained, proving that the species breeds in Yarkand. Dr. Scully observes:—"This species is a seasonal visitant to the plains of Eastern Turkestan, arriving about the end of March, and leaving in September." He gives an interesting note on the habits and breeding of the species near Yarkand in May. The Turki name for the Bluethroat is "Chaghchi," an appellation given to it because it is said to make a sound resembling the noise of the spinning-wheels used by the women of Yarkand.

#### 185. CYANECULA WOLFI.

*Lusciola suecica*,  $\beta$ . *orientalis*, Severtz. Turkest. Jevotn. p. 65 (1873).

*Cyanecula wolfi*, Dresser, Ibis, 1875, p. 342; Oates, Faun. Brit. Ind., Birds, ii. p. 100 (1890).

*Cyanecula leucocyanea*, Brehm; Bidd. Ibis, 1881, p. 65; Scully, t. c. p. 447; Bidd. Ibis, 1882, p. 278.

*Erithacus cyaneculus* (Wolf); Seebohm, Cat. B. Brit. Mus. v. p. 311 (1881).

No. 473. Shargol, August 20, 1873.

Colonel Biddulph sends a note:—"On our return journey we found numbers in the Nobra valley in June, where they were more plentiful than *C. cærulecula*, which was also present. In the Indus valley both species were noticed, but *C. cærulecula* was the more numerous."

#### Genus **CALLIOPE**.

#### 186. CALLIOPE PECTORALIS.

*Calliope bailloni*, Severtz. Turkest. Jevotn. pp. 65, 122 (1873); id. Str. F. iii. p. 429 (1875).

*Calliope pectoralis*, Gould; Dresser, Ibis, 1876, p. 78; Bidd. Ibis, 1881, p. 64; Scully, t. c. p. 447; Severtz. Ibis, 1883, p. 67; Oates, Faun. Brit. Ind., Birds, ii. p. 103 (1890).

*Erythacus pectoralis* (Gould); Seebohm, Cat. B. Brit. Mus. v. p. 306 (1881).

No. 394, ♀. Mataian, August 14, 1873.

No. 413, ♂. Mataian, August 15, 1873.—Length 6·3 inches, wing 2·9, tail 2·45, tarsus 1·15; expanse 9; bill from front 0·5, from gape 0·78. Iris brown; bill black; feet black, tarsi paler.

Nos. 416, 419, juv. Mataian, August 15, 1873.

Dr. Stoliczka mentions finding this species with fully fledged young near Mataian. Colonel Biddulph saw it in Ladák, just below the Zoji-lá.

Genus **IANTHIA**.

187. **IANTHIA RUFILATA**.

*Tarsiger rufilatus* (Hodgs.); Sharpe, Cat. B. Brit. Mus. iv. p. 256 (1879); Scully, Ibis, 1881, p. 446.

*Nemura cyanura* (nec Pall.); Bidd. Ibis, 1881, p. 64.

*Ianthia rufilata*, Oates, Faun. Brit. Ind., Birds, ii. p. 106 (1890).

No. 324. Sonámarg, August 11, 1873.—Bill black; feet brownish black; iris brown. Length 5·5 inches, wing 3·05, tail 2·3, tarsus 0·94.

No. 325, ♂. Sonámarg, August 11, 1873.—Bill blackish horny; feet dark horny brown; iris dark brown. Length 5·75 inches, wing 3·2, tail 2·45, tarsus 1·0.

Genus **ADELURA**.

188. **ADELURA CÆRULEOCEPHALA**.

*Ruticilla cæruleocephala* (Vig.); Hume & Henders. Lahore to Yark. p. 211, pl. xiv. (1873); Seebohm, Cat. B. Brit. Mus. v. p. 353 (1881).

*Adelura cæruleocephala*, Wardlaw Ramsay, Ibis, 1880, p. 58; Oates, Faun. Brit. Ind., Birds, ii. p. 108 (1890).

Dr. Henderson met with this species in the Sind Valley and at Púnc, on the way down from Kashmir.

Genus **COPSYCHUS**.

189. **COPSYCHUS SAULARIS**.

*Copsychus saularis* (L.); Hume & Henders. Lahore to Yark. p. 202 (1873); Sharpe, Cat. B. Brit. Mus. vii. p. 61 (1883); Oates, Faun. Brit. Ind., Birds, ii. pp. 116 (1890).

No. 145. Oori, July 23, 1873.

A young specimen in spotted plumage.

Dr. Henderson only observed this bird in the low hills through which the road to Kashmir from the Punjab first passes on leaving the plains. This species seems never to ascend the hills to any great height.

Subfamily **TURDINÆ**.

Genus **MERULA**.

190. **MERULA MAXIMA**.

*Merula maxima*, Seebohm, Cat. B. Brit. Mus. v. p. 405 (1881); C. Swinhoe, Ibis, 1882, p. 105; Menzbier, Ibis, 1885, p. 357; Oates, Faun. Brit. Ind., Birds, ii. p. 123 (1890).

*Merula vulgaris*, Ray ; Scully, Str. F. iv. p. 139 (1876) ; id. J. A. S. Beng. lvi. p. 81 (1887).

*Merula merula* (L.) ; Sharpe, Trans. Linn. Soc. (2) Zool. v. part 3, p. 72 (1889).

No. 916, ♀. Sanju, November 1, 1873.—Wings reach within 3 inches of end of tail. Total length 11·8 inches, wing 5·4, tail 5·0, tarsus 1·25 ; expanse 17·0 ; bill from front 0·85, from gape 1·32. Iris brown ; bill horny black ; feet horny black.

Nos. 954, 955. Bora, November 4, 1873.—[Wing 5·3 inches.] Native name “Karha Shachshák.”

No. 1044. Yarkand, November 23, 1873.

Nos. 1100, 1101, 1120. Yangihissár, December 1, 1873.—[Wing 5·3–5·4 inches.]

No. 1214, ♂. Káshghar, January 20, 1874.—Length 11·6 inches, wing 5·3 ; bill from front 0·9, from gape 1·3. Iris dark brown ; bill yellow, streaked with black about the base ; feet black ; eyelid yellow.

The length of wing agrees with the larger dimensions given by Seebohm for the large Central Asian race of the Blackbird, but does not quite come up to the 5·85 given by him.

No. 1215, ♀. Káshghar, January 10, 1874.—Length 11·5 inches, wing 5·2, tail 4·8, tarsus 1·4. Iris dark brown ; upper mandible black, the lower one dark brown ; feet blackish brown ; margin of soles pale yellow.

Dr. Stoliczka's ‘Diary’ notes that this Blackbird was common near Bora and Yangihissár. Dr. Scully obtained a pair near Yarkand in February, and says that it was common, during the winter, near Káshghar and Yarkand. It seemed to keep principally among *Eleagnus* trees and thorn-bushes in the vicinity of unfrozen bits of water. It migrated northwards in spring, repairing to the hills and the country about Marálbáshi. It was said to feed principally on berries, &c., and its Turki name is “Maina.”

#### 191. MERULA CASTANEA.

*Merula castanea*, Gould ; Seebohm, Cat. B. Brit. Mus. v. p. 259 (1881) ; Oates, Faun. Brit. Ind., Birds, ii. p. 128 (1890).

Nos. 91, 93. Dungagally, Murree, July 4, 1873.

No. 343. Sonámarg, August 11, 1873.

#### 192. MERULA BOULBOUL.

*Merula bouboul* (Lath.) ; Seebohm, Cat. B. Brit. Mus. v. p. 248 (1881) ; Oates, Faun. Brit. Ind., Birds, ii. p. 130 (1890).

No. 12, ♂. Murree, June 23, 1873.

No. 40, ♂. Murree, June 25, 1873.

No. 63, ♀. Murree, June 30, 1873.

No. 108, ♂. Murree, July 9, 1873.

#### 193. MERULA ATRIGULARIS.

*Merula atrigularis* (Temm.) ; Seebohm, Cat. B. Brit. Mus. v. p. 269 (1881) ; Homeyer & Tancreé, MT. orn. Ver. Wien, 1883, p. 87 ; Scully, Ibis, 1881, p. 439 ; id. J. A. S. Beng. lvi. p. 81 (1887) ; Sharpe, Trans. Linn. Soc. (2) Zool. v. part 3, p. 72 (1889) ; Oates, Faun. Brit. Ind., Birds, ii. p. 131 (1890).

*Planesticus atrogularis*, Hume & Henders. Lahore to Yark. p. 192 (1873); Scully, Str. F. iv. p. 140 (1876).

*Turdus atrigularis*, Severtz. Turkest. Jevotn. pp. 64, 118 (1873); Dresser, Ibis, 1875, p. 332; Blauf. East. Persia, ii. p. 158 (1876); Biddulph, Ibis, 1881, p. 53; C. Swinhoe, Ibis, 1882, p. 105; Zarudn. Ois. Transcasp. p. 40 (1885).

*Turdus mystacinus*, Severtz. Turkest. Jevotn. pp. 64, 118, 119 (1873); Dresser, Ibis, 1875, p. 332; Severtz. Ibis, 1883, p. 70; Menzbier, Ibis, 1885, p. 356.

Nos. 924, 926, 927. Sanju, October 29, 1873.

No. 928. Khushtágh, November 2, 1873.

No. 971. Kárgchalik, November 6, 1873.—Native name "Shackshak."

Nos. 1082, 1084. Yarkand, November 28, 1873.

Nos. 1099, 1109. Yangihissár, December 1, 2, 1873.

No. 1128. Káshghar, December 10, 1873.

Nos. 1220, 1221. Káshghar, January 21, 1874.

No. 1297. Káshghar, February 2, 1874.

No. 1237. Marálbáshi, January, 1874.

Dr. Stoliczka states in his 'Diary' that this Thrush was very numerous near Khushtágh on the 2nd of November, feeding on the seeds of *Eleagnus*. It was again common near Yangihissár on the 1st of December.

Colonel Biddulph records it from Yarkand on the 26th of November, and from Marálbáshi in January. He writes as follows:—"First seen at Sanju in November. It was common about Káshghar all through the winter. I also obtained a specimen at Marálbáshi, but I never saw it in Wakhán or on the Pámir, though we again found it when in May we returned to the plains of Yarkand."

Dr. Henderson met with this species in October from Chagra (15,000 feet) above the Pangong Lake, throughout Ladák and Kashmir, and by November it was widely spread over the plains of the Punjab.

Dr. Scully writes:—"This species was first met with at Sulaghz Langar in September, and was a common bird in the plains, in the neighbourhood of Káshghar, Yarkand, &c., during the winter. It was usually seen about trees lining water-courses or growing near tanks. The bird disappeared entirely in spring, migrating in a north-easterly direction, towards the hills and the Jot district, it is said, where it was reported to breed. It feeds chiefly on *Eleagnus*-berries called 'jigda' in Turki, and commonly known as 'Trebizond dates'; hence its name 'Jigda chuk,' *i. e.* 'Jigda-eater.'"

#### 194. MERULA UNICOLOR.

*Merula unicolor* (Tick.); Seebohm, Cat. B. Brit. Mus. v. p. 271 (1881); Oates, Faun. Brit. Ind., Birds, ii. p. 132 (1890).

*Geocichla unicolor* (Tick.); Hume & Henders. Lahore to Yark. p. 192 (1873).

Nos. 194, 218, 219, 222, 225, 226. Srinagar, July 28-31, 1873.—Native name "Kástúr."

Colonel Biddulph also obtained this Ouzel near Srinagar in July, and again at Baramula on the 1st of August, but did not observe it out of Kashmir. Dr. Henderson states that it was very common in the latter country, but was not seen beyond the Zoji-lá.



195. *MERULA OBSCURA*.

*Merula obscura* (Gm.) ; Seebohm, Cat. B. Brit. Mus. v. p. 273 (1881) ; Oates, Faun. Brit. Ind., Birds, ii. p. 134 (1890).

*Turdus pallens*, Pall. ; Severtz. Turkest. Jevotn. p. 65 (1873) ; Dresser, Ibis, 1875, p. 334 ; Prjev. in Rowley's Orn. Misc. ii. p. 198 (1877).

No. 903. Sanju, October 28, 1873.

Genus **TURDUS**.196. *TURDUS VISCIVORUS*.

*Turdus viscivorus*, Linn. ; Severtz. Turkest. Jevotn. p. 65 (1873) ; Dresser, Ibis, 1875, p. 334 ; Blanf. East. Persia, ii. p. 157 (1876) ; Wardlaw Ramsay, Ibis, 1880, p. 54 ; Seebohm, Cat. B. Brit. Mus. v. p. 194 (1881) ; Biddulph, Ibis, 1881, p. 53 ; Scully, t. c. p. 439 ; C. Swinhoe, Ibis, 1882, p. 105 ; Homeyer & Tancré, MT. orn. Ver. Wien, 1883, p. 86 ; Radde, Ornith., iii. p. 488 (1887) ; Oates, Faun. Brit. Ind., Birds, ii. p. 148 (1890).

No. 388. Baltal, August 12, 1873.

Genus **PETROPHILA**.197. *PETROPHILA ERYTHROGASTER*.

*Petrophila erythrogaster* (Vig.) ; Oates, Faun. Brit. Ind., Birds, ii. p. 143 (1890).

*Monticola erythrogaster* (Vig.) ; Seebohm, Cat. B. Brit. Mus. v. p. 325 (1881).

No. 94, ♂. Dungagally, near Murree, July 4, 1873.

198. *PETROPHILA CINCLORHYNCHA*.

*Monticola cinclorhyncha* (Vig.) ; Seebohm, Cat. B. Brit. Mus. v. p. 320 (1881) ; Scully, Ibis, 1881, p. 438.

*Oreocetes cinclorhynchus* (Vig.) ; Wardlaw Ramsay, Ibis, 1880, p. 54 ; Biddulph, Ibis, 1881, p. 53.

*Petrophila cinclorhyncha* (Vig.) ; Oates, Faun. Brit. Ind., Birds, ii. p. 144 (1890).

Nos. 3, 4, ♀ ad. Murree, June 20, 1873.

Nos. 38, 53, ♂ ad. Murree, June 26, 1873.

No. 152, ♂ juv. Urumbu, July 24, 1873.

No. 353, ♂ ad. Sonámarg, August 12, 1873.—Length 7·6 inches, wing 4·2, tail 2·8, tarsus 0·9 ; expanse 12·6 ; bill from front 0·77, from gape 1·1. Iris brown ; bill horny black ; feet pale horny.

Nos. 357, 358, ♂ juv. Sonámarg, August 12, 1873.

The young males, even in their first or spotted plumage, are easily recognizable, as they show the white wing-spot very plainly.

Colonel Biddulph procured a specimen near Sonámarg on the 17th of July, but did not see the species anywhere else.

199. *PETROPHILA CYANA*.

*Petrocossyphus cyaneus* (L.) ; Hume & Henders. Lahore to Yark. p. 190 (1873) ; Dresser, Ibis, 1875, p. 335 ; Wardlaw Ramsay, Ibis, 1880, p. 54 ; Bidd. Ibis, 1881, p. 53.

*Petrocincla cyane*, Severtz. Turkest. Jevotn. p. 65 (1873).

*Monticola cyanea*, Blanf. East. Persia, ii. p. 155 (1876); Zarudn. Ois. Transcasp. p. 39 (1885).

*Monticola cyanus*, Seebohm, Cat. B. Brit. Mus. v. p. 316 (1881); Scully, Ibis, 1881, p. 438; C. Swinh. Ibis, 1882, p. 105; Severtz. Ibis, 1883, p. 68; Scully, J. A. S. Beng. lvi. p. 82 (1887); Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 73 (1889).

*Petrophila cyanus*, Oates, Faun. Brit. Ind., Birds, ii. p. 146 (1890).

No. 425, ♂ juv. Drás, August 16, 1873.

A young bird in nearly complete blue plumage, moulting from the spotted or nestling plumage.

No. 426, ♀. Drás, August 16, 1873.

No. 512. Kharbu, August 22, 1873.

Nos. 548, 565. Leh, August 28, 1873.

Colonel Biddulph says that he only saw this Rock-Thrush in the Indus Valley and a little way out of it to Drás. Dr. Henderson writes:—"The Blue Rock-Thrush was only met with in Ladák, and there only on the upward journey in June and July. Solitary individuals were seen throughout Ladák west of Leh, at Shargol and other places, near streams &c."

#### Genus **MONTICOLA**.

##### 200. MONTICOLA SAXATILIS.

*Petrocincla saxatilis* (L.); Severtz. Turkest. Jevotn. p. 65 (1873); Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 87; Zarudn. Ois. Transcasp. p. 39 (1885); Radde, Ornith., iii. p. 487 (1887).

*Monticola saxatilis*, Hume & Henders. Lahore to Yark. p. 190 (1873); Dresser, Ibis, 1875, p. 335; Blanf. East. Persia, ii. p. 156 (1876); Scully, Str. F. iv. p. 139 (1876); Prjev. in Rowley's Orn. Misc. ii. p. 201 (1877); Bidd. Ibis, 1881, p. 53; Scully, ibid. p. 439; Severtz. Ibis, 1883, p. 68; Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 73 (1889); Oates, Faun. Brit. Ind., Birds, ii. p. 147 (1890).

No. 640. Leh, September 6, 1873.—Length 8 inches, wing 4·68, tail 2·35, tarsus 1·15; bill from front 0·7, from gape 1·1. Iris dark brown; bill horny black, lower mandible paler; feet black.

An apparently adult female in winter plumage.

No. 1678. S.W. of Ighiz Yar, May 18, 1874.

An adult male in full plumage.

Dr. Stoliczka states that this Rock-Thrush was rare near Ighiz Yar. Dr. Henderson obtained a young male, a bird of the year, at Sháhídúla, in Hill Yarkand, on the 21st of September. Dr. Scully gives the following note:—"This species was first noticed about the end of September at some of the small oases in the desert-ground between Sanju and Kárgalik, at an elevation of about 6000 feet. The birds were tolerably numerous, hopping about in cultivated fields. After that these birds were never observed until the following year, when they were met with on the banks of the Karakásh at an elevation of about 12,000 feet. They frequented grassy ground, and when alarmed flew up and perched on the neighbouring rocks."

## Family CINCLIDÆ.

Genus **CINCLUS**.

## 201. CINCLUS KASHMIRIENSIS.

*Hydrobata cashmeriensis* (Gould) ; Hume & Henders. Lahore to Yark. p. 189 (1873) ; Prjev. in Rowley's Orn. Misc. ii. p. 201 (1877) ; Biddulph, Ibis, 1881, p. 52.

*Cinclus aquaticus*, var. *cashmeriensis*, Blanf. East. Persia, ii. p. 212 (1876).

*Cinclus cashmeriensis*, Sharpe, Cat. B. Brit. Mus. vi. p. 312 (1881) ; Scully, Ibis, 1881, p. 438.

*Cinclus kashmiriensis*, Oates, Faun. Brit. Ind., Birds, ii. p. 162 (1890).

No. 713. Tanksi, September 16, 1873.

No. 699. Tsúltak, north of Chang-lá, September 15, 1873.

Dr. Stoliczka says that he noticed this species at Zingral, about 15,500 feet, on the road to the Chang-lá. Colonel Biddulph also obtained specimens in streams under and on both sides of the same pass. Dr. Henderson writes :—"Several specimens of this White-breasted Dipper were procured and numbers seen, not in Kashmir, but in Eastern Ladák, in the stream which runs from Chagra into the Pangong Lake. It appears to be a permanent resident here, as it was noticed and shot in this locality both on going and coming. A nestling obtained on the 14th of July could not long have left the nest, and old birds were seen on this stream on the 8th of October, at an elevation of 15,000 feet, when, except quite at its centre, it was a mass of solid ice."

Dr. Lansdell met with this species at Tischkun on the 1st of November, 1888.

## 202. CINCLUS ASIATICUS.

*Cinclus asiaticus*, Swains. ; Severtz. Turkest. Jevotn. p. 66 (1873) ; Dresser, Ibis, 1876, p. 175 ; Scully, Ibis, 1881, p. 437 ; Sharpe, Cat. B. Brit. Mus. vi. p. 314 (1881) ; Scully, J. A. S. Beng. lvi. p. 83 (1887) ; Oates, Faun. Brit. Ind., Birds, ii. p. 163 (1890).

*Hydrobata asiatica*, Hume & Henders. Lahore to Yark. p. 188 (1873) ; Bidd. Ibis, 1881, p. 52.

No. 1653. Tarbashi, May 12, 1874.

Dr. Henderson says :—"The Indian Dipper was noticed to be very common on the return journey all the way from Kargil in Ladák to Púñch at the foot of the hills, leading from the plains of the Panjab into Kashmir by the Haji Pir Pass. Curiously enough, none were noticed on the upward route ; but the bird in May and June is usually much higher up than in the autumn and winter."

## 203. CINCLUS LEUCOGASTER.

*Cinclus leucogaster*, Bp. ; Severtz. Turkest. Jevotn. p. 66 (1873) ; Dresser, Ibis, 1875, p. 175 ; Sharpe, Cat. B. Brit. Mus. vi. p. 314 (1881) ; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 87.

No. 712. Tanksi, September 16, 1873.—A young bird.

No. 912. North of Sanju Pass, October 26, 1873.—Shot by Dr. Bellew.

No. 1370. Tughamati, February 18, 1874.

No. 1652. Tarbashi, May 12, 1874.

This latter specimen shows evident traces of breeding, the plumage being much worn.

Colonel Biddulph writes :—" This was obtained just as we entered the Hills *en route* to the Pámir at an elevation of 5500 feet."

204. CINCLUS SORDIDUS.

*Hydrobata sordida*, Gould ; Hume & Henders. Lahore to Yark. p. 189 (1873) ; Prjev. in Rowley's Orn. Misc. ii. p. 202 (1877).

*Cinclus sordidus*, Sharpe, Cat. B. Brit. Mus. vi. p. 317 (1881) ; Oates, Faun. Brit. Ind., Birds, ii. p. 165 (1890).

Dr. Henderson procured a single specimen at Kargil in Ladák, on the 23rd of October.

Family TROGLODYTIDÆ.

Genus **ANORTHURA**.

205. ANORTHURA PALLIDA.

*Troglodytes nepalensis* (nec Blyth) ; Severtz. Turkest. Jevotn. p. 66 (1873).

*Troglodytes europæus* (nec V.) ; Severtz. t. c. p. 138 (1873).

*Troglodytes pallidus*, Hume, Str. F. iii. p. 219, note (1875).

*Troglodytes parvulus* (nec Koch), Dresser, Ibis, 1876, p. 175.

*Anorthura pallida*, Sharpe, Cat. B. Brit. Mus. vi. p. 273 (1881).

No. 936. Sanju, November 1, 1873.—Length 4·5 inches, wing 2·0, tail 1·5, tarsus 0·7.

Iris brown ; upper mandible blackish, the lower one paler ; feet pale horny brown.

No. 956. Bora, November 4, 1873.

Nos. 997, 1007, 1024, 1035, 1086. Yarkand, November 11–28, 1873.

No. 1118. Yangihissár, December 2, 1873.

No. 1227. Káshghar, January 23, 1874.

No. 1339. Káshghar, February 11, 1874.

Colonel Biddulph writes :—" We got this at Sanju, and we also found it about Yarkand and Káshghar. We often noticed it about the willow-trees in the fields."

206. ANORTHURA NEGLECTA.

*Troglodytes nipalensis* (nec Hodgs.) ; Hume & Henders. Lahore to Yark. p. 187 (1873).

*Anorthura neglecta* (Brooks) ; Sharpe, Cat. B. Brit. Mus. vi. p. 278 (1881) ; Oates, Faun. Brit. Ind., Birds, i. p. 338 (1889).

Dr. Henderson obtained a specimen in the Sind Valley, but observes that it seems to be rare in Kashmir.

## Family ACCENTORIDÆ.

Genus **ACCENTOR**.

## 207. ACCENTOR NEPALENSIS.

*Accentor nipalensis*, Hodgs. ; Hume & Henders. Lahore to Yark. p. 234 (1873) ; Prjev. in Rowley's Orn. Misc. ii. p. 185 (1877) ; Bidd. Ibis, 1881, p. 74 ; Scully, t. c. p. 568 ; Bidd. Ibis, 1882, p. 281 ; Sharpe, Cat. B. Brit. Mus. vii. p. 664 (1883) ; Oates, Faun. Brit. Ind., Birds, ii. p. 166 (1890).

Dr. Henderson procured an example on the Pangong Lake on the 10th of October, but the specimen appears not to have passed into the Hume Collection, and has apparently perished.

## 208. ACCENTOR HIMALAYANUS.

*Accentor himalayanus*, Blyth, J. A. S. Beng. xi. p. 187 (1842) ; Oates, Faun. Brit. Ind., Birds, ii. p. 168 (1890).

*Accentor altaicus*, Brandt ; Severtz. Turkest. Jevotn. pp. 66, 133 (1873) ; id. Str. F. iii. p. 428 (1875) ; Dresser, Ibis, 1876, p. 91 ; Bidd. Ibis, 1881, p. 74 ; Scully, t. c. p. 569 ; Severtz. Ibis, 1883, p. 65 ; Homeyer & Tancré, MT. orn. Ver. Wien, 1883, p. 85 ; Sharpe, Cat. B. Brit. Mus. vii. p. 660 (1883).

No. 812. Balakchi, October 17, 1873.

Genus **THARRHALEUS**.

## 209. THARRHALEUS FULVESCENS.

*Accentor fulvenscens*, Severtz. Turkest. Jevotn. pp. 66, 132 (1873) ; id. Str. F. iii. p. 428 (1875) ; Prjev. in Rowley's Orn. Misc. ii. p. 186 (1877) ; Bidd. Ibis, 1881, p. 75 ; Scully, t. c. p. 569 ; Bidd. Ibis, 1882, p. 281, pl. viii. ; Severtz. Ibis, 1883, p. 84 ; Sharpe, Cat. B. Brit. Mus. vii. p. 655 (1883) ; Menzbier, Ibis, 1885, p. 356.

*Accentor montanellus* (nec Pall.) ; Scully, Str. F. iv. p. 155 (1876).

*Tharrhaleus fulvenscens*, Oates, Faun. Brit. Ind., Birds, ii. p. 171 (1890).

No. 813. Sháhídúla, October 19, 1873.

No. 833. N. of Suget Pass, Sháhídúla, October 1873 (*Dr. Bellew*).

No. 844, ♂. S. of Sanju Pass, October 22, 1873.—Bill black ; feet pale fleshy ; iris reddish brown. Length 6·6 inches, wing 3·2, tail 2·75.

Nos. 899, 900, 908, 910. Sanju, October 28, 1873.

No. 1193. S. of Chakmak, January 9, 1874.

No. 1374. Uibulák, 7000 feet, February 23, 1874.

No. 1453. Aktásh, April 3, 1874.

No. 1593. Sarikol, May 7, 1874.

Dr. Stoliczka first identified this species as a new one in his 'Diary,' on shooting one near Sháhídúla on the 19th of October. It was common near Sanju, and he saw it again at Jigda on the 26th of February. Colonel Biddulph procured specimens at Tám, on the 25th of October, from 6000 to 8000 feet, and at Aktala on the 22nd of March. He writes to us :—"Found in the lower hills coming down from Sanju, and the same going up to the Pámir. They were very numerous in the Kulustan valley."



## 210. THARRHALEUS RUBECULOIDES.

*Accentor rubeculoides*, Hodgs.; Hume & Henders. Lahore to Yark. p. 234 (1873); Prjev. in Rowley's Orn. Misc. ii. p. 187 (1887); Sharpe, Cat. B. Brit. Mus. vii. p. 657 (1883).  
*Tharrhaleus rubeculoides*, Oates, Faun. Brit. Ind., Birds, ii. p. 169 (1890).

No. 585, ad. Leh, August 30, 1873.

Nos. 589, juv., 590, juv., 591, ad., 594, ad. Leh, August 30, 1873.

Nos. 626, 634, juv., 638. Leh, September 4-5, 1873.

Dr. Stoliczka notes in his 'Diary' that both old and young birds were common near Leh early in September. Colonel Biddulph also procured specimens at Tanksi (13,200 feet) on the 15th of September. He says that it was also seen on crossing the Sakti Pass, but nowhere else. Dr. Henderson states that it was "seen in considerable numbers on his return journey, from one march beyond the Pangong Lake right through Ladák. It frequented marshy ground and the banks of streams, hopping about from rock to rock."

## 211. THARRHALEUS JERDONI.

*Accentor jerdoni*, Brooks; Bidd. Ibis, 1881, p. 75; Scully, t. c. p. 569; Sharpe, Cat. B. Brit. Mus. vii. p. 660 (1883).

*Accentor strophiatius* (nec Hodgs.); Hume & Henders. Lahore to Yark. p. 234 (1873).

*Tharrhaleus jerdoni*, Oates, Faun. Brit. Ind., Birds, ii. p. 172 (1890).

No. 339, juv. Sonámarg, August 11, 1873.

Nos. 402, juv., 406, ad. Mataian, 11,200 feet, August 14, 1873.

To this species doubtless belongs the young bird spoken of by Dr. Henderson as *A. strophiatius* (l. c.). Colonel Biddulph states that he obtained a male in the Karakásh Valley.

## Family TIMELIIDÆ.

## Genus GARRULAX.

## 212. GARRULAX ALBIGULARIS.

*Garrulax albogularis* (Gould); Sharpe, Cat. B. Brit. Mus. vii. p. 439 (1883); Oates, Faun. Brit. Ind., Birds, i. p. 82 (1889).

No. 9. Murree, June 21, 1873.

Nos. 95, 96. Changligally, July 5, 1873.

No. 109. Murree, July 10, 1873.

## Genus TROCHALOPTERUM.

## 213. TROCHALOPTERUM ERYTHROCEPHALUM.

*Trochalopterus erythrocephalum* (Vig.); Sharpe, Cat. B. Brit. Mus. vii. p. 360 (1883); Oates, Faun. Brit. Ind., Birds, i. p. 89 (1889).

No. 97. Changligally, near Murree, July 5, 1873.

## 214. TROCHALOPTERUM SIMILE.

*Trochalopterus simile*, Hume, Ibis, 1871, p. 408; id. & Henders. Lahore to Yark. p. 193, pl. vii. (1873); Bidd. Ibis, 1881, p. 53; Scully, t. c. p. 439; Oates, Faun. Brit. Ind., Birds, i. p. 96 (1889).

Nos. 10, 20, 30, 56. Murree, June 1873.

No. 90. Dungagally, July 4, 1874.

All these specimens have the grey on the wings and tail characteristic of the western race which Mr. Hume has called *T. simile*, and they show no approach to the golden-winged *T. variegatum*. I reverse my previous opinion that it is the same as the latter species, and follow Mr. Oates in keeping the two species distinct.

Dr. Henderson found this species very common at Baramula, west of Srinagar, in November. It has a peculiar call, like "wheet-ooi-ooi."

#### 215. TROCHALOPTERUM LINEATUM.

*Trochalopteron lineatum* (Vig.) ; Hume & Henders. Lahore to Yark. p. 195, pl. viii. (1873) ; Bidd. Ibis, 1881, p. 54 ; Scully, t. c. p. 440 ; Bidd. Ibis, 1882, p. 272 ; Sharpe, Cat. B. Brit. Mus. viii. p. 377 (1883) ; Oates, Faun. Brit. Ind., Birds, i. p. 101 (1889).

Nos. 24, 28. Murree, June 24, 1873.

No. 159. Baramula, July 25, 1873.

According to Dr. Henderson, this species was very abundant from Gond all the way through Kashmir on the return journey in October.

#### Genus **ARGYA**.

#### 216. ARGYA CAUDATA.

*Chattorhea caudata* (Dum.) ; Hume & Henders. Lahore to Yark. p. 197, pl. ix. (1873) ; C. Swinh. Ibis, 1882, p. 105.

*Argya caudata*, Sharpe, Cat. B. Brit. Mus. vii. p. 393 (1883) ; Oates, Faun. Brit. Ind., Birds, i. p. 106 (1889).

No. 129. Tinali, July 18, 1873.

Dr. Henderson states that this species was very common on the low hills on the roads leading into the plains of the Punjab.

#### Genus **POMATORHINUS**.

#### 217. POMATORHINUS ERYTHROGENYS.

*Pomatorhinus erythogenys*, Vig. ; Sharpe, Cat. B. Brit. Mus. vii. p. 430 (1883) ; Oates, Faun. Brit. Ind., Birds, i. p. 124 (1889).

No. 16. Murree, June 23, 1873.

#### Subfamily **BRACHYPTERYGINÆ**.

#### Genus **MYIOPHONEUS**.

#### 218. MYIOPHONEUS TEMMINCKI.

*Myiophoneus temmincki*, Vig. ; Severtz. Turkest. Jevotn. p. 65 (1873) ; Hume & Henders. Lahore to Yark. p. 187 (1873) ; Dresser, Ibis, 1875, p. 335 ; Bidd. Ibis, 1881, p. 52 ; Scully, t. c. p. 437 ; C. Swinhoe, Ibis, 1882, p. 105 ; Sharpe, Cat. B. Brit. Mus. vii. p. 7 (1883) ; id. Trans. Linn. Soc. (2) Zool. v. p. 75 (1889) ; Oates, Faun. Brit. Ind., Birds, i. p. 178 (1889).

No. 111. Murree, July 11, 1873

No. 284. Gond, August 8, 1873.

Colonel Biddulph observes :—" On the upward journey I only saw this in Kashmir, where it is very common in the Sind Valley, but coming back I saw it at Drás, in July."

Dr. Henderson observes :—" The Yellow-billed Whistling-Thrush, so common throughout the lower Himalayas, south of the Snowy Range, was met with abundantly from the foot of the hills leading into Kashmir right up to the Zoji-la."

Genus **LARVIVORA.**

219. **LARVIVORA BRUNNEA.**

*Larvivora brunnea*, Hodgs. ; Oates, Faun. Brit. Ind., Birds, i. p. 182 (1889).

*Erythacus brunneus* (Hodgs.) ; Seebohm, Cat. B. Brit. Mus. v. p. 302 (1881).

No. 33. Murree, June 25, 1873.

No. 106. Murree, July 9, 1873.

Genus **HODGSONIUS.**

220. **HODGSONIUS PHÆNICUROIDES.**

*Hodgsonius phœnicuroides* (Hodgs.) ; Hume & Henders. Lahore to Yark. p. 187, pl. vi. (1873) ; Prjev. in Rowley's Orn. Misc. ii. p. 179 (1877) ; Sharpe, Cat. B. Brit. Mus. vii. p. 81 (1883) ; Oates, Faun. Brit. Ind., Birds, i. p. 190 (1889).

No. 321, ♀. Sonámarg, August 11, 1873.—Bill dark horny ; tarsi fleshy violaceous, feet pale horny ; iris brown. Length 7·4 inches, wing 2·8, tail 3·1, tarsus 1·15.

Nos. 327, adult, 328, 338, juv. Sonámarg, August 11, 1873.

Dr. Stoliczka states that this bird, which he says is "like *Dumeticola*," was rare near Sonámarg. Dr. Henderson procured one specimen in Kashmir at the head of the Sind Valley. Colonel Biddulph says it was only noticed by him in Kashmir.

Subfamily *SIBIINÆ*.

Genus **LIOPTILA.**

221. **LIOPTILA CAPISTRATA.**

*Malacias capistrata* (Vig.) ; Sharpe, Cat. B. Brit. Mus. vii. p. 400 (1883).

*Lioptila capistrata*, Oates, Faun. Brit. Ind., Birds, i. p. 196 (1889).

No. 57. Murree, June 28, 1873.

No. 81. Murree, July 2, 1873.

Subfamily *LIOTRICHINÆ*.

Genus **LIOTHRIX.**

222. **LIOTHRIX LUTEA.**

*Liothrix lutea* (Scop.) ; Sharpe, Cat. B. Brit. Mus. vii. p. 644 (1883) ; Oates, Faun. Brit. Ind., Birds, i. p. 221 (1889).

Nos. 147, 153. Urumbu, July 24, 1873.

Genus **PTERUTHIUS**.223. **PTERUTHIUS ERYTHROPTERUS**.

*Pteruthius erythropterus* (Vig.) ; Oates, Faun. Brit. Ind., Birds, i. p. 224 (1889).

No. 105, ♀. Murree, July 9, 1873.

No. 112, ♂. Murree, July 11, 1873.

No. 114, ♂. Murree, July 12, 1873.

No. 116, ♀. Murree, July 13, 1873.

No 112 is a young male with a brown head and back, but having the black ear-stripe and black wings of the adult male, with the exception that the wing-coverts have the ends brown. The tail is black, but is tipped with white, as in the adult female.

Family **PYCNONOTIDÆ**.Genus **HYPsipETES**.224. **HYPsipETES PSAROIDES**.

*Hypsipetes psaroides* (Vig.) ; Hume & Henders. Lahore to Yark. p. 198 (1873) ; Sharpe, Cat. B. Brit. Mus. vi. p. 36 (1881) ; Oates, Faun. Brit. Ind., Birds, i. p. 260 (1889).

No. 1. Murree, June 20, 1873.

No. 6. Murree, June 21, 1873.

Nos. 22, 26. Murree, June 24, 1873.

Nos. 76, 78. Murree, July 2, 1873.

No. 148. Urumbu, July 24, 1873.

Colonel Biddulph procured this species in the Jhelum Valley in August 1874. Dr. Henderson says that it was common at Banipál on both sides of the pass leading from Jamu to Srinagar, but was not seen elsewhere.

Genus **MOLPASTES**.225. **MOLPASTES INTERMEDIUS**.

*Pycnonotus intermedius*, A. Hay ; Sharpe, Cat. B. Brit. Mus. vi. p. 130 (1881).

*Molpastes intermedius*, Oates, Faun. Brit. Ind., Birds, i. p. 272 (1889).

No. 54. Murree, June 27, 1873.

226. **MOLPASTES LEUCOGENYS**.

*Otocompsa leucogenys* (Gray) ; Hume & Henders. Lahore to Yark. p. 200 (1873) ; Sharpe, Cat. B. Brit. Mus. vi. p. 160 (1881).

*Molpastes leucogenys*, Oates, Faun. Brit. Ind., Birds, i. p. 272 (1889).

No. 169. Sopur, July 26, 1873.

Colonel Biddulph states that this species was very common in the Sind Valley and in Kashmir generally, but was seen nowhere else. Dr. Henderson also states that it was common throughout Kashmir.

## Family CAMPOPHAGIDÆ.

Genus **PERICROCOTUS**.227. **PERICROCOTUS BREVIROSTRIS**.

*Pericrocotus brevirostris* (Vig.) ; Hume & Henders. Lahore to Yark. p. 184 (1873) ; Sharpe, Cat. B. Brit. Mus. iv. p. 79 (1879) ; Wardlaw Ramsay, Ibis, 1880, p. 52 ; Scully, Ibis, 1881, p. 435 ; Oates, Faun. Brit. Ind., Birds, i. p. 483 (1889).

Nos. 85, 86, ♂ ad. Changligally, near Murree, July 2, 1873.

No. 87, ♀ ad. Changligally, near Murree, July 3, 1873.

No. 313. Sonámarg, August 10, 1873.

Colonel Biddulph procured a male in the Jhelum Valley. Dr. Henderson says that the species was met with throughout Kashmir, from Jamu to the foot of the Zoji Pass, in May and June.

## Family MUSCICAPIDÆ.

Genus **MUSCICAPA**.228. **MUSCICAPA GRISOLA**.

*Muscicapa grisola*, L. ; Severtz. Turkest. Jevotn. p. 67 (1873) ; Dresser, Ibis, 1876, p. 188 ; Blanf. East. Persia, ii. p. 143 (1876) ; Sharpe, Cat. B. Brit. Mus. iv. p. 151 (1879) ; Scully, Ibis, 1881, p. 437 ; C. Swinh. Ibis, 1882, p. 104 ; Severtz. Ibis, 1883, p. 70 ; Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 69 (1889) ; Oates, Faun. Brit. Ind., Birds, ii. p. 4 (1890).

*Butalis grisola*, Hume & Henders. Lahore to Yark. p. 185 (1875) ; Wardlaw Ramsay, Ibis, 1880, p. 53 ; Zarudn. Ois. Transcasp. p. 35 (1885).

No. 731. Tanksi, September 17, 1873.

A single specimen of this Flycatcher was obtained by Dr. Henderson on the 22nd of September, "in an absolute desert some 14,000 feet above the sea-level, at the foot of the Suget Pass, Ladák, a few miles south of what may be considered the boundary of Yarkand. The thermometer stood at 23° Fahrenheit when the bird was shot."

Genus **HEMICHELIDON**.229. **HEMICHELIDON SIBIRICA**.

*Hemichelidon fuliginosa*, Hodgs. ; Hume & Henders. Lahore to Yark. p. 184, pl. iv. (1873).

*Hemichelidon sibirica*, Gm. ; Prjev. in Rowley's Orn. Misc. ii. p. 272 (1877) ; Sharpe, Cat. B. Brit. Mus. iv. p. 120 (1879) ; Wardlaw Ramsay, Ibis, 1880, p. 53 ; Bidd. Ibis, 1881, p. 52 ; Scully, t. c. p. 436.

Nos. 302, 303, 317, 332, 333, 347, 359, adults and young. Sonámarg, August 10-12, 1873.

No. 354, adult. Sonámarg, August 12, 1873.—Bill horny black ; feet dark brown ; iris brown. Length 4·8 inches, wing 2·93, tail 1·8, tarsus 0·5.

Dr. Henderson and Colonel Biddulph both obtained this species at Sonámarg, and the latter gentleman states that it was very common in Kashmir.



Genus **SIPHIA**.

## 230. SIPHIA HYPERYTHRA.

*Siphia hyperythra*, Cab. ; Oates, Faun. Brit. Ind., Birds, ii. p. 10 (1890).

*Muscicapa hyperythra*, Sharpe, Cat. B. Brit. Mus. iv. p. 163 (1879).

Colonel Biddulph obtained two specimens in Kashmir.

Genus **CYORNIS**.

## 231. CYORNIS SUPERCILIARIS.

*Muscicapula superciliaris* (Jerd.) ; Sharpe, Cat. B. Brit. Mus. iv. p. 204 (1879) ; Wardlaw Ramsay, Ibis, 1880, p. 54.

*Cyornis superciliaris*, Oates, Faun. Brit. Ind., Birds, ii. p. 17 (1890).

Nos. 45, 50, 55. Murree, June 26, 27, 1873.

Genus **DIGENEA**.

## 232. DIGENEA LEUCOMELANURA.

*Digenea leucomelanura*, Hodgs. ; Sharpe, Cat. B. Brit. Mus. iv. p. 459, pl. xiii. (1879, fig. pess.).

*Cyornis leucomelanurus*, Oates, Faun. Brit. Ind., Birds, ii. p. 16 (1890).

No. 331. Sonámarg, August 11, 1873.

Genus **STOPAROLA**.

## 233. STOPAROLA MELANOPS.

*Eumyias melanops* (Vig.) ; Hume & Henders. Lahore to Yark. p. 186 (1873).

*Stoparola melanops*, Sharpe, Cat. B. Brit. Mus. iv. p. 438 (1879) ; Oates, Faun. Brit. Ind., Birds, ii. p. 28 (1890).

No. 84. Changligally, Murree, July 2, 1873.

Dr. Henderson obtained a single specimen in Kashmir.

Genus **ALSEONAX**.

## 234. ALSEONAX LATIROSTRIS.

*Alseonax latirostris* (Raffl.) ; Hume & Henders. Lahore to Yark. p. 185, pl. 5 (1873) ; Sharpe, Cat. B. Brit. Mus. iv. p. 127 (1879) ; Oates, Faun. Brit. Ind., Birds, ii. p. 35 (1890).

No. 677. S. of Chimray, September 13, 1873.—Bill horny black, yellowish fleshy on basal half of lower mandible ; feet black ; iris dark brown. Length 5 inches, wing 2·8, tail 1·8, tarsus 0·55.

## 235. ALSEONAX RUFICAUDUS.

*Cyornis ruficauda*, Sw. ; Wardlaw Ramsay, Ibis, 1880, p. 53.

*Siphia ruficauda* (Sw.) ; Sharpe, Cat. B. Brit. Mus. iv. p. 457 (1879).

*Alseonax ruficaudus*, Oates, Faun. Brit. Ind., Birds, ii. p. 36 (1890).

No. 136, juv. Guri, July 20, 1873.

No. 157, juv. Baramula, July 25, 1873.

Colonel Biddulph obtained a specimen at Baramula on the 1st of August.

Genus **NILTAVA**.

236. NILTAVA SUNDARA.

*Niltava sundara*, Hodgs. ; Sharpe, Cat. B. Brit. Mus. iv. p. 463 (1879) ; Oates, Faun. Brit. Ind., Birds, ii. p. 41 (1890).

Nos. 65, 66, ♂ ♀ ad. Murree, June 30, 1873.

No. 5, ♂ ad. Murree, June 20, 1873.

No. 7, ♂ ad. Murree, June 21, 1873.

No. 52, ♂ ad. Murree, June 26, 1873.

♀ ad. Murree, July 10, 1873.

Genus **TERPSIPHONE**.

237. TERPSIPHONE PARADISI.

*Tchitrea paradisi* (Linn.) ; Hume & Henders. Lahore to Yark. p. 184 (1873).

*Terpsiphone paradisi*, Sharpe, Cat. B. Brit. Mus. iv. p. 346 (1879) ; Oates, Faun. Brit. Ind., Birds, ii. p. 45 (1890).

*Muscipeta paradisi*, Wardlaw Ramsay, Ibis, 1880, p. 52 ; C. Swinh. Ibis, 1882, p. 104.

No number. Chackoti, July 22, 1873.

No. 144. Oori, July 23, 1873.

Nos. 183, 184, 187. Srinagar, July 27, 28, 1873.

Dr. Henderson states that the Paradise Flycatcher was very abundant in Kashmir in May and June wherever there were large shady trees. It was seen at Vernág, and was very plentiful about Srinagar and the Sind Valley as far as Gond. It was never seen after leaving Kashmir.

Family HIRUNDINIDÆ.

Genus **CHELIDON**.

238. CHELIDON URBICA.

*Chelidon urbica* (L.) ; Blanf. East. Persia, ii. p. 216 (1876) ; Scully, Ibis, 1881, p. 428 ; Severtz. Ibis, 1883, p. 70 ; Zarudn. Ois. Transcasp. p. 32 (1885) ; Sharpe, Cat. B. Brit. Mus. x. p. 87 (1885) ; Radde, Ornith., iii. p. 490 (1887) ; Oates, Faun. Brit. Ind., Birds, ii. p. 269 (1890).

*Hirundo urbica*, Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 83.

No. 526, ♀. Snurla, August 24, 1873.—Length 6 inches, wing 4·3 ; tail, inner tail-feathers 1·75, outer 2·4 ; tarsus 0·46 ; expanse 11·75 ; bill from front 0·25, from gape 0·45 ; length of foot 0·95. Iris dark brown ; bill black ; feet fleshy white, covered with white feathers to the end of the toes.

No. 532. Saspúl, on the Indus, August 25, 1873.

No. 592. Leh, August 30, 1873.

No. 921, juv. Sanju, October 29, 1873.

Colonel Biddulph tells us that he shot a specimen at Kargil in Ladák.

Genus **COTILE**.239. **COTILE RIPARIA.**

*Cotile riparia* (L.) ; Severtz. Turkest. Jevotn. p. 67 (1873) ; Dresser, Ibis, 1876, p. 189 ; Blanf. East. Persia, ii. p. 216 (1876) ; Prjev. in Rowley's Orn. Misc. ii. p. 162 (1877) ; C. Swinh. Ibis, 1882, p. 101 ; Sharpe, Cat. B. Brit. Mus. x. p. 96 (1885) ; Zarudn. Ois. Transcasp. p. 32 (1885) ; Scully, J. A. S. Beng. lvi. p. 83 (1887) ; Oates, Faun. Brit. Ind., Birds, ii. p. 272 (1890).

*Hirundo riparia*, Homeyer & Tancreé, MT. orn. Ver. Wien, 1883, p. 83.

No. 1480. Panjah, April 17, 1874.—Length 5 inches, wing 4, tail 2·15, tarsus 0·4 ; expanse 10·6 ; bill from front 0·23, from gape 0·52 ; length of foot 1. Iris dark brown ; bill black ; feet dusky brownish, shining ; soles ashy.

240. **COTILE RUPESTRIS.**

*Cotile rupestris* (Scop.) ; Hume & Henders. Lahore to Yark. p. 177 (1873) ; Severtz. Turkest. Jevotn. p. 67 (1873) ; Dresser, Ibis, 1876, p. 189 ; Blanf. East. Persia, ii. p. 216 (1876) ; Prjev. in Rowley's Orn. Misc. ii. p. 162 (1877) ; Wardlaw Ramsay, Ibis, 1880, p. 48 ; Bidd. Ibis, 1881, p. 47 ; Scully, ibid. p. 427 ; Severtz. Ibis, 1883, p. 70 ; Zarudn. Ois. Transcasp. p. 32 (1885) ; Sharpe, Cat. B. Brit. Mus. x. p. 109 (1885) ; Radde, Orn. iii. p. 490 (1887) ; Scully, J. A. S. Beng. lvi. p. 83 (1887) ; Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 77 (1889).

*Ptyonoprogne rupestris*, Scully, Str. F. iv. p. 131 (1876) ; Oates, Faun. Brit. Ind., Birds, ii. p. 273 (1890).

*Hirundo rupestris*, Homeyer & Tancreé, MT. orn. Ver. Wien, 1883, p. 83.

No. 478, imm. Shargol, W. Ladák, August 20, 1873.

No. 523, adult. Lamaguru, August 23, 1873.

No. 904, imm. Sanju, October 28, 1873.

Nos. 1656, 1660, adult. Pasrobat, May 13, 1874.

Dr. Stoliczka states that the Rock-Martin was common near Pasrobat, and was apparently going to breed in the neighbourhood.

It was often seen by Dr. Henderson, who states that it was not uncommon near Sanju, and was met with both on going and returning on the banks of the Indus near Leh, and was numerous about Dras.

Dr. Scully gives the following note :—“ This Crag-Martin was first observed in Eastern Turkestan in August, between Sanju and Kizil Aghil. After that it was seen every day along the Arpalak stream and the Karakásh river. It flew about hunting over the water and perched on the high rocks near the streams. At Kizil Aghil I was informed by the inhabitants that this bird left them when the leaves fell off the trees, and reappeared again in spring when the trees began to blossom ; they said that the nests were placed in the clefts of rocks near the river. The Turki name for this species is ‘ *Tagh Karloghach* ’—‘ Mountain Swallow ;’ and I need scarcely add that it was never seen in the plains.”

Genus **HIRUNDO**.

241. **HIRUNDO RUSTICA**.

*Hirundo rustica*, L. ; Hume & Henders. Lahore to Yark. p. 176 (1873) ; Dresser, Ibis, 1876, p. 188 ; Blanf. East. Persia, ii. p. 215 (1876) ; Scully, Str. F. iv. p. 131 (1876) ; Wardlaw Ramsay, Ibis, 1880, p. 48 ; Bidd. Ibis, 1881, p. 47 ; Scully, ibid. p. 427 ; C. Swinh. Ibis, 1882, p. 100 ; Homeyer & Tancré, MT. orn. Ver. Wien, 1883, p. 83 ; Severtz. Ibis, 1883, p. 70 ; Zarudn. Ois. Transcasp. p. 32 (1885) ; Sharpe, Cat. B. Brit. Mus. x. p. 128 (1885) ; Scully, J. A. S. Beng. lvi. p. 83 (1887) ; Radde, Ornith., iii. p. 487 (1887) ; Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 77 (1889) ; Oates, Faun. Brit. Ind., Birds, ii. p. 277 (1890).

*Hirundo domestica*, Severtz. Turkest. Jevotn. p. 67 (1873).

No. 149. Urumbu, July 24, 1873.

No. 1602. Sarikol, May 9, 1874.

Nos. 1732, 1733, 1734, 1762. Yarkand, May 15-20, 1874.

On the 8th of May Dr. Stoliczka noticed the Common Swallow as very common about Sarikol. At Yarkand it was breeding, and the diary contains the following note:—" *H. rustica* makes here a nest of mud, lined with fine grass, horse-hair, and a few feathers, just as it does at home. It does not appear to begin to lay before the 10th of May, as all the eggs I got were nearly fresh. There were four to five eggs in the nest."

Dr. Henderson says that the Common Swallow was "found in great abundance in Kashmir in June, where it was breeding, and in the plains of Yarkand it was common all the way from Sanju to the city. At Oi-tográk, in August, they were collecting in flocks, and perching in vast numbers on the mulberry-trees, probably preparatory to migration, because on the return of the Expedition to the same locality in September not one was to be seen." Dr. Scully observes:—"The Common Swallow is found in great numbers in the plains of Eastern Turkestan, from Sanju to Káshghar, for six months in the year. The birds arrive about the middle of April, and migrate towards the end of October, not a single bird of this species being ever seen in winter. They breed during May and June ; many young birds, just able to fly, being found in the early part of July. The Yarkandis call the bird ' *Uí Karloghach* '—'House Swallow,' and say that it always makes a mud nest on the roof of houses, the number of eggs laid being from three to five, and that two broods are raised in the season. Unlike the Swift, this species was frequently seen perching on trees, and settling on the ground and on sand banks."

242. **HIRUNDO NIPALENSIS**.

*Hirundo nipalensis*, Hodgs. ; Sharpe, Cat. B. Brit. Mus. x. p. 160 (1885) ; Oates, Faun. Brit. Ind., Birds, ii. p. 282 (1890) ; Sharpe & Wyatt, Monogr. Hirund. part xiv. (1890).

No. 74. Murree, July 1, 1873.

## Order SCANSORES.

## Family INDICATORIDÆ.

Genus **INDICATOR**.

## 243. INDICATOR XANTHONOTUS.

*Indicator xanthonotus*, Blyth ; Stoliczka, Str. F. i. p. 529 (1873) ; Shelley, Cat. B. Brit. Mus. xix. p. 3 (1891).

*Indicator radcliffii*, Hume, Ibis, 1872, p. 10.

*Pseudofringilla xanthonotus*, Hume, Str. F. i. p. 314 (1873).

*Pseudospiza xanthonota*, Sharpe in Rowley's Orn. Misc. i. p. 207 (1876).

No. 89, ♂, adult. Dungagally, July 7, 1873.—Bill yellow, dusky towards the tip; feet pale greenish, soles white; iris dark brown. Length 6 inches, wing 4, tail 2·5, tarsus 9·16.

A full account of the capture of this interesting specimen is given by Dr. Stoliczka in 'Stray Feathers' (*l. c.*), where he gives notes on its anatomy.

## Family CAPITONIDÆ.

Genus **MEGALÆMA**.

## 244. MEGALÆMA MARSHALLORUM.

*Megalæma marshallorum*, Swinh. ; Shelley, Cat. B. Brit. Mus. xix. p. 53 (1891).

No. 19. Murree, June 23, 1873.

No. 23. Murree, June 24, 1873.

## Family PICIDÆ.

## Subfamily PICINÆ.

Genus **GECINUS**.

## 245. GECINUS SQUAMATUS.

*Gecinus squamatus* (Vig.) ; Bidd. Ibis, 1881, p. 49; Scully, t. c. p. 430; Hargitt, Cat. B. Brit. Mus. xviii. p. 43 (1890).

Nos. 14, 17, 29, ♀. Murree, June 23-24, 1873.

Colonel Biddulph procured a female at Baramula.



246. *GEVINUS OCCIPITALIS*.

*Gecinus occipitalis* (Vig.); Hargitt, Cat. B. Brit. Mus. xviii. p. 56 (1890).

No. 61, ♂. Murree, June 29, 1873.

Genus **HYPOPICUS**.

247. *HYPOPICUS HYPERYTHRUS*.

*Hypopicus hyperythrus* (Vig.); Hargitt, Cat. B. Brit. Mus. xviii. p. 199 (1890).

No. 72, ♂. Murree, June 30, 1873.

Genus **DENDROCOPUS**.

248. *DENDROCOPUS LEUCOPTERUS*. (Plates XII., XIII.)

*Picus* (*Dendrocopus*) *leucopterus*, Salvad. Atti R. Accad. Sci. Torino, vi. p. 129 (1870-71).

*Picus leptorhynchus*, Severtz. Str. F. 1875, p. 430; id. Ibis, 1875, pp. 487-491; Dresser, Ibis, 1876, p. 320; Menzb. Ibis, 1885, p. 357.

*Picus leucopterus*, Hume, Str. F. iii. p. 219 (1875); Scully, Str. F. iv. p. 134 (1876).

*Dendrocopus leucopterus*, Hargitt, Cat. B. Brit. Mus. xviii. p. 215 (1890).

No. 917, ♂. Sanju, November 1, 1873.—Bill black; feet greenish horny black; iris red. Length 9·5 inches, wing 4·85, tail 4·1, tarsus 0·9.

No. 917, ♀. Sanju, October 28, 1873.—Bill black; feet greenish horny black; iris red. Length 9·5 inches, wing 4·85, tail 4·1, tarsus 0·9.

No. 942, ♀. Sanju, October 31, 1873.

No. 1047, ♂. Yarkand, November 23, 1873. Kizil-i-shtán (Kokan).

No. 1307, ♀. Káshghar, February 4, 1873.

During his visit to England, Dr. Severtzoff examined the above-mentioned skins obtained by Dr. Stoliczka, and he named one of them "*Picus leptorhynchus*, Sev., *typicus*," and the other "*Picus leptorhynchus*, Sev., var. *P. leucopterus*, Salvad." Dr. Severtzoff always seems to have regarded his name of *leptorhynchus* as taking priority over Salvadori's name of *leucopterus*, and his assertion called forth a protest from Count Salvadori (Ibis, 1876, p. 386), a reference which seems to have escaped the eye of my friend Mr. Hargitt.

Acting on the advice of Dr. Severtzoff I had figures prepared of the two forms as identified by him, in order to show the difference in the pattern of the wings; but I agree with Mr. Hargitt that only one species is recognizable.

Colonel Biddulph writes:—" *Picus leucopterus* we first saw between Sanju and Yarkand, and it was common everywhere in the plains of Turkestan, especially between Káshghar and Marálbáshi during the winter. I do not remember seeing it after our return in May."

Dr. Scully states that this Woodpecker was seen near Yarkand during the winter only, and then was far from common. In the summer it is said to move up northwards to the forest-region in the neighbourhood of Aksu. The Turki name for this species is "*Sokochak*," i. e. the "Striker."

## 249. DENDROCOPUS HIMALAYENSIS.

*Picus himalayanus*, J. & S.; Hume & Henders. Lahore to Yark. p. 179 (1873).

*Picus himalayensis*, Wardlaw Ramsay, Ibis, 1880, p. 50; Bidd. Ibis, 1881, p. 48; Scully, t. c. p. 429.

*Dendrocopus himalayensis* (J. & S.); Hargitt, Cat. B. Brit. Mus. xviii. p. 220 (1890).

Nos. 15, 25, ♂ imm. Murree, June 23, 24, 1873.

No. 88, ♂ imm. Dungagally, July 3, 1873.

No. 102, ♂ imm. Changligally, July 6, 1873.

No. 116, ♀. Murree, July 13, 1873.

No. 151, ♂ imm. Urumbu, July 24, 1873.

No. 340, ♂ imm. Sonámarg, August 11, 1873.

Dr. Henderson found this Woodpecker very common in Kashmir, but, as might be expected, it did not cross the Zoji-là. Colonel Biddulph shot a female at Sonámarg on the 14th of July.

## 250. DENDROCOPUS BRUNNEIFRONS.

*Dendrocopus brunneifrons* (Vig.); Hargitt, Cat. B. Brit. Mus. xviii. p. 264 (1890).

No. 113. Murree, July 11, 1873.

## Subfamily IYNGINÆ.

## Genus IYNX.

## 251. IYNX TORQUILA.

*Iynx torquilla*, L.; Severtz. Turkest. Jevotn. p. 68 (1873); Dresser, Ibis, 1876, p. 320; Blanf. East. Persia, ii. p. 136 (1876); Bidd. Ibis, 1881, p. 49; Scully, ibid. p. 430; C. Swinh. Ibis, 1882, p. 103; Severtz. Ibis, 1883, p. 71; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 91; Hargitt, Cat. B. Brit. Mus. xviii. p. 560 (1890).

No. 323, adult. Sonámarg, August 11, 1873.—Bill pale horny brown; feet livid greenish; iris light brown. Length 7·6 inches, wing 3·3, tail 2·8, tarsus 0·75.

No. 781. Chagra, September 21, 1873.

## Order UPUPÆ.

## Family UPUPIDÆ.

## Genus UPUPA.

## 252. UPUPA EPOPS.

*Upupa epops*, L.; Severtz. Turkest. Jevotn. p. 68 (1873); Hume & Henders. Lahore to Yark. p. 182 (1873); Scully, Str. F. iv. p. 136 (1876); Dresser, Ibis, 1876, p. 319; Blanf. East. Persia, ii. p. 130 (1876); Wardlaw Ramsay, Ibis, 1880, p. 52; Bidd. Ibis, 1881, p. 50; Scully, ibid. p. 432; C. Swinh. Ibis, 1882, p. 103; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 83; Severtz. Ibis, 1883, p. 71; Menzbier, Ibis, 1885, p. 357; Zarudn. Ois. Transcasp. p. 47 (1885); Scully, J. A. S. Beng. lvi. p. 80 (1887); Radde, Ornith. iii. p. 491 (1887); Sharpe, Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 84 (1889).

No. 160. Baramula, July 25, 1873. Soikuk.

No. 163. Sopur, July 26, 1873.

No. 1004. Yarkand, November 11, 1873.

No. 1018. Yarkand, November 13, 1873.—“Höpöpöp ; Hodhod.”

Dr. Henderson says :—“The Hoopoe was seen almost daily the whole way from Lahore to Yarkand city. In the barest deserts, where the Ravens that travelled with the camp were almost the only living things to be seen, the Hoopoe would occasionally be met with ; and again on the highest passes it was noticed, apparently entirely at its ease. It was seen at Lak Zung, overlooking the Lingzi Thang, and in a former journey I saw it at the very top of the Tugulung Pass (16,000 feet).” According to Dr. Scully the Hoopoe is a very common bird in Kashgharia, where it is a permanent resident. “It was met with,” he says, “in all sorts of places ; in the fields about Káshghar and Yarkand, near villages ; at the little oasis in the desert between Khárgchalik and Sanju, in the valley of the Karakásh ; and it seemed perfectly happy in the barren region near the Karakorum Pass, an elevation of over 18,000 feet. The Yarkandis call it ‘Hüpüp.’”

On the 26th of May Dr. Stoliczka found young birds near Yarkand, the nest being placed in a hole of a poplar.

## Order COCCYGES.

### Family CUCULIDÆ.

#### Genus **CUCULUS**.

#### 253. CUCULUS CANORUS.

*Cuculus canorus*, L. ; Hume & Henders. Lahore to Yark. p. 180 (1873) ; Severtz. Turkest. Jevotn. p. 68 (1873) ; Dresser, Ibis, 1876, p. 320 ; Blanf. East. Persia, ii. p. 119 (1876) ; Scully, Str. F. iv. p. 134 (1876) ; Wardlaw Ramsay, Ibis, 1880, p. 50 ; Bidd. Ibis, 1881, p. 49 ; Scully, ibid. p. 430 ; C. Swinh. Ibis, 1882, p. 103 ; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 91 ; Severtz. Ibis, 1883, p. 71 ; Menzbier, Ibis, 1885, p. 357 ; Zarudn. Ois. Transcasp. p. 48 (1885) ; Radde, Ornis, iii. p. 491 (1887).

Nos. 42, 43. Murree, June 25, 1873.

No. 191. Srinagar, July 28, 1873.—“Vairul.”

No. 506. Kharbu, August 22, 1873.—[A young bird in customary dark plumage.]

No. 1718. Yangihissár, April 1874.

Nos. 1752, 1753, 1754, 1765. Yarkand, May 15–20, 1874.—[Adults in grey plumage.]

Nos. 1707, 1779, 1783. Yarkand, May 15–20, 1874.—All three in hepatic plumage.

Dr. Henderson writes :—“The Common Cuckoo was met with on the upward journey in May and June along the whole road from Jamu up to the Banihál Pass, and thence *viâ* Srinagar and the Sind Valley to the Zoji-là, where the last specimen was seen, chanting its ‘note of dread to husbands’ ears’ from a budding birch-tree, close to the snow, and at an elevation of some 11,000 feet.” Dr. Scully states that the Common Cuckoo arrives in the plains of Eastern Turkestan about the middle of April, and leaves about the beginning of August. He gives a long account of its breeding habits &c., and says that the Turki name is “*Kakkok*.”

Genus **COCCYSTES**.254. **COCCYSTES JACOBINUS**.

*Coccytes jacobinus* (Bodd.) ; Bidd. Ibis, 1881, p. 50.

No. 135. Tinali, July 19, 1873.

Order **HALCYONES**.Family **ALCEDINIDÆ**.Genus **ALCEDO**.255. **ALCEDO BENGALENSIS**.

*Alcedo bengalensis* (Gm.) ; Hume & Henders. Lahore to Yark. p. 178 (1873) ; Dresser, Ibis, 1876, p. 320 ; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 83.

*Alcedo ispida*,  $\beta$ . *bengalensis*, Severtz. Turkest. Jevotn. p. 68 (1873).

No number, adult. Sopur, July 26, 1873.

Nos. 203, 228, imm. Srinagar, July 29-31, 1873.

No. 1160, adult. Káshghar, December 17, 1873.—Bill blackish, tinged with fleshy at the base ; feet coral-red ; iris dark brown. Length 7.1 inches, wing 2.9, tail 1.5, tarsus 0.4.

Nos. 1327, 1329. Káshghar, February 10, 1874.

Dr. Henderson states that the Common Indian Kingfisher was excessively plentiful in Kashmir, but was never observed after crossing the Zoji-là. The native names were "Tint Konu" and "Tuntu."

Genus **CERYLE**.256. **CERYLE VARIA**.

*Ceryle rudis* (L., pt.) ; Sharpe, Monogr. Alced. p. 61, pl. 19 (1871) ; Wardlaw Ramsay, Ibis, 1880, p. 50.

No. 241. Srinagar, August 1, 1873.—"Tindh."

Colonel Biddulph shot a specimen at Baramula, and the species was met with not uncommonly along the Jhelum in Kashmir by Dr. Henderson.

Order **CORACIÆ**.Family **CYPSELIDÆ**.Genus **CYPSELUS**.257. **CYPSELUS PEKINENSIS**.

*Cypselus pekinensis*, Swinh. ; Scully, Str. F. iv. p. 132 (1876) ; Scully, Ibis, 1881, p. 428 ; C. Swinh. Ibis, 1882, p. 101.

- No. 298. Sonámarg, August 11, 1873.—Bill black ; feet fleshy brown ; iris brown. Length 7·4 inches, wing 6·65, tail 3·05, tarsus 0·4.  
 No. 319. Sonámarg, August 10, 1873 (*Capt. Biddulph*).  
 No. 430. Tashgam, August 17, 1873.  
 No. 542. Snimu, August 26, 1873.  
 Nos. 759, 760. Lukung, September 20, 1873.  
 No. 798. Kárgchalik, November 6, 1873.

Dr. Stoliczka states that he saw this Swift in considerable numbers near Sonámarg on the 10th of August. Dr. Scully observes:—"The Swift was first noticed flying over the fort at Yarkand on the 10th of April ; after that it was seen daily near the fort and city until the end of July, when it seemed to have disappeared." He gives an account of its nesting, and says that the Turki name for it is "*Kirich Karloghach*," the "Sabre Swallow."

I have examined the specimens of *Cypselus acuticauda* mentioned by Dr. Scully (*t. c.* p. 132), and believe that they are also referable to *C. pekinensis*.

#### Family CAPRIMULGIDÆ.

##### Genus **CAPRIMULGUS.**

#### 258. CAPRIMULGUS ÆGYPTIUS.

*Caprimulgus arenicolor*, Severtz. Ibis, 1875, p. 491 ; Dresser, Ibis, 1876, p. 190 ; Zarudn. Ois. Transcasp. p. 33 (1885).

*Caprimulgus ægyptius*, Licht. ; Scully, Str. F. iv. p. 133 (1876).

A single specimen was obtained by Dr. Scully in the forest-region of the Dolan, about thirty miles from the city of Yarkand ; but it was never met with in the immediate neighbourhood of Káshghar or Yarkand.

#### Family CORACIIDÆ.

##### Genus **CORACIAS.**

#### 259. CORACIAS GARRULA.

*Coracias garrula* (L.) ; Hume & Henders. Lahore to Yark. p. 177 (1873) ; Severtz. Turkest. Jevotn. p. 68 (1873) ; Dresser, Ibis, 1876, p. 319 ; Blanf. East. Persia, ii. p. 125 (1876) ; Scully, Str. F. iv. p. 133 (1876) ; Biddulph, Ibis, 1881, p. 48 ; Scully, *ibid.* p. 429 ; C. Swinhoe, Ibis, 1882, p. 102 ; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 83 ; Zarudn. Ois. Transcasp. p. 48 (1885) ; Scully, J. A. S. Beng. lvi. p. 79 (1887) ; Radde, Ornith., iii. p. 492 (1887) ; Sharpe, Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 84 (1889).

- No. 259. Srinagar, July 5, 1873.  
 No. 193. Srinagar, July 28, 1873.  
 No. 265. Srinagar, August 5, 1873.—Nilknósh.  
 No. 644. Leh, September 6, 1873.

Colonel Biddulph mentions that he shot a female in the Sind Valley on the 20th of July, 1874, but did not notice this species away from Kashmir.

Dr. Henderson says that the European Roller, "so common in Kashmir, especially in



the valleys and along the courses of the rivers, appears to be a rare bird in Yarkand, where, however, it probably breeds, as a young bird was there obtained." Dr. Scully says that this species is said to be common in Khokand and Western Turkestan, where it is called "*Kok Kargha*," the "Blue Crow." It only passes through Eastern Turkestan. The first specimen was obtained at Sulaghz Langar in August, and appeared to be quite unknown to the natives. Later in the same month a second specimen was found dead near the Karakásh River; both birds had evidently been migrating southward.

### Family MEROPIDÆ.

#### Genus **MEROPS**.

#### 260. **MEROPS APIASTER**.

*Merops apiaster* (L.); Severtz. Turkest. Jevotn. p. 68 (1873); Blanf. East. Persia, ii. p. 122 (1876); Dresser, Ibis, 1876, p. 319; Wardlaw Ramsay, Ibis, 1880, p. 49; Bidd. Ibis, 1881, p. 48; C. Swinh. Ibis, 1882, p. 102; Zarudn. Ois. Transcasp. p. 49 (1885); Scully, J. A. S. Beng. lvi. p. 79 (1887); Radde, Ornith., iii. p. 492 (1887); Sharpe, Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 84 (1889).

Nos. 214, 215. Sonámarg, July 30, 1873.

### Order PSITTACI.

#### Family PSITTACIDÆ.

#### Genus **PALÆORNIS**.

#### 261. **PALÆORNIS SCHISTICEPS**.

*Palæornis schisticeps*, Hodgs. in Gray's Zool. Misc. p. 85 (1844).

Nos. 21, 68. Murree, June 23-30, 1873.

No. 73. Murree, July 1, 1873.

No. 150. Urumbu, July 24, 1873 (*Capt. Biddulph*).—"Tóter."

### Order COLUMBÆ.

#### Family TRERONIDÆ.

#### Genus **SPHENOCERCUS**.

#### 262. **SPHENOCERCUS SPHENURUS**.

*Sphenocercus sphenurus* (Vig.); Hume & Henders. Lahore to Yark. p. 270 (1873).

No. 71. Murree, June 30, 1873.

No. 80. Murree, July 2, 1873.

Dr. Henderson says that this Fruit-Pigeon was very common near the Chenab between Jamu and Banikál, but was not observed in the valley of Kashmir.

## Family COLUMBIDÆ.

Genus **COLUMBA**.

## 263. COLUMBA ŒNAS.

*Columba œnas*, L.; Severtz. Turkest. Jevotn. p. 68 (1873); Dresser, Ibis, 1876, p. 221; Scully, Str. F. iv. p. 176 (1876); Blanf. East. Persia, ii. p. 269 (1876); Homeyer & Tancreé, MT. orn. Ver. Wien, 1883, p. 91; Sharpe, Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 85 (1889).

Nos. 1053, 1058. Yarkand, November 24th, 1873.

Dr. Scully writes:—"This species was frequently seen in the neighbourhood of Yarkand during the months of May, June, and July, perching on high trees and feeding about on the ground near cultivation. It breeds in Eastern Turkestan, the nest, as I was informed, being usually placed in high poplars (*Populus alba*). The Turki name for the Stock-Pigeon is 'Koshkal.'"

## 264. COLUMBA LIVIA.

*Columba neglecta*, Hume, Lahore to Yark. p. 272 (1873).

*Columba livia*, Gm.; Severtz. Turkest. Jevotn. p. 68 (1873); Dresser, Ibis, 1876, p. 221; Blanf. East. Persia, ii. p. 268 (1876); C. Swinh. Ibis, 1882, p. 117; Radde, Ornis, iii. p. 492 (1887).

No. 469, ♀ ad. Shargol, August 20, 1873.—Length 13·75, wing 9·0, tail 4·75, tarsus 1·1. Iris reddish orange, golden round the pupil; eyelashes and cere white; bill greenish horny black; feet lead-colour.

Having compared the above specimen with an English-killed one, I cannot see that there is any difference between Mr. Hume's *Columba neglecta* (Lahore to Yark. p. 272) and the ordinary European Rock-Dove.

Colonel Biddulph shot a specimen at Panjah on the 22nd of April, and says that this was the only time he saw the species; they were in small flocks.

## 265. COLUMBA INTERMEDIA.

*Columba fusca*, Pall.; Severtz. Turkest. Jevotn. p. 68 (1873).

*Columba intermedia*, Strickl.; Blanf. East. Persia, ii. p. 268 (1876); Dresser, Ibis, 1876, p. 221; Bidd. Ibis, 1881, p. 91.

No. 336. Sonámarg, August 11, 1873 (*Capt. Trotter*).

No. 424. Drás, August 16, 1873.

No. 492. Kharbu, August 21, 1873.—Length 14 inches, wing 9·1, tail 4·8, tarsus 1·14; expanse 28·5; bill from front 0·82, from gape 1·15. Iris reddish orange; bill horny black; feet coral-red.

No. 530. Snurla, August 24, 1873.

No. 685, imm. Chimray, September 13, 1873.

No. 1355. Káshghar, February 14, 1874.—Shot in the fields.

Called "*Yā Kabtar*," because it breeds in the banks of rivers.

## 266. COLUMBA RUPESTRIS.

*Columba rupestris*, Bp. ; Severtz. Turkest. Jevotn. p. 68 (1873) ; Dresser, Ibis, 1876, p. 221 ; Prjev. in Rowley's Orn. Misc. ii. p. 379 (1877) ; Bidd. Ibis, 1881, p. 92 ; Scully, t. c. p. 584 ; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 91 ; Severtz. Ibis, 1883, p. 71.

*Columba rupicola*, Pall. ; Hume & Henders. Lahore to Yark. p. 273 (1873) ; Scully, Str. F. iv. p. 176 (1876).

No. 616. Leh, September 4th, 1873.

Nos. 689, 690, 691, 692. Above Sakti, 15,000 feet, September 14, 1873.

Nos. 686, 687. Above Sakti, 14,000 feet, September 14, 1873.—Length 13·1–13·2 inches, wing 9·3–9·4, tail 1·0 ; expanse 27·65–27·8 ; bill from front 0·55–0·62, from gape 0·92–0·95. Iris golden red ; bill black ; foot-lobe red, claws horny black.

No. 714. Tanksi, September 17, 1873.

Nos. 743, 744, 746, 747. Lukung, September 19, 1873.

Nos. 1359, 1360, 1361, 1363, 1364. Tangitár, February 18, 1874.

Nos. 1421, 1422. Pasrobat, March 26, 1874.

“This Pigeon,” writes Colonel Biddulph, “was very common after leaving Leh, and specially so at the head of the Pangong Lake. Then we saw them occasionally all down the valley of the Karakásh, and also on the return between Kugiár and the Yangi Dewán Pass. I did not notice it on the Pámir.” The species is noted in Dr. Stoliczka's ‘Diary’ as being very common near Lukung.

Dr. Scully writes :—“This Pigeon was common in the hills on the south side of Eastern Turkestan, during the months of August and September, at elevations of from 8000 to 16,000 feet. The birds seemed to be very fond of rocky cliffs, and usually flew about in small flocks or parties. The Turki name for this species is ‘Yáwá Kabtar’ (Wild Pigeon).”

## 267. COLUMBA LEUCONOTA.

*Columba leuconota*, Vig. ; Hume & Henders. Lahore to Yark. p. 274 (1873) ; Prjev. in Rowley's Orn. Misc. ii. p. 380 (1877) ; Bidd. Ibis, 1881, p. 92 ; Scully, t. c. p. 584.

Tashgam, Drás Valley, August 17, 1873.

A single specimen was obtained by Dr. Henderson in June near Drás, where it was very abundant.

## 268. COLUMBA EVERSMANNI.

*Palumbæna eversmanni*, Bp. ; Hume & Henders. Lahore to Yark. p. 271, pl. xxxi. (1873) ; Scully, Str. F. iv. p. 175 (1876).

*Columba fusca*, Pall. ; Severtz. Turkest. Jevotn. p. 68 (1873).

*Columba intermedia*, Strickl. ; Dresser, Ibis, 1876, p. 221 ; Bidd. Ibis, 1881, p. 91 ; C. Swinh. Ibis, 1882, p. 117 ; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 91.

*Columba eversmanni*, Scully, J. A. S. Beng. lvi. p. 86 (1887) ; Sharpe, Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 84 (1889).

Dr. Scully writes :—“This Pigeon was first obtained in a large clump of poplars (*Populus balsamifera*) at Taskhama in June. There they were in great numbers, but so wild that it was difficult to get specimens ; I shot two young birds, however, so that there can be no doubt about this species breeding in Eastern Turkestan. In August, again, at Yak Shamba Bazar, I shot a couple of these birds in a clump of poplars and saw many about. The Yarkandis

say that this species always haunts Toghrak (poplar) jungles, and that the nest is always placed on those trees. The Turki name for this Pigeon is '*Kügan*.' *P. evermanni* is probably only a seasonal visitant to Kashgharia, migrating in winter." Dr. Henderson procured a single specimen at Chagra, above the Pangong Lake, at an elevation of 16,000 feet, on the 8th of October.

Genus **TURTUR.**269. *TURTUR STOLICZKÆ*. (Plate XIV.)

*Turtur stoliczkæ*, Hume; Scully, Str. F. iv. p. 178 (1876).

*Turtur chinensis*, Severtz. Turkest. Jevotn. p. 68 (1873).

*Turtur intercedens*, Dresser, Ibis, 1876, p. 221.

No. 949. Sanju, November 1, 1873.—Native name "*Pachtak*."

No. 1309, ♂. Káshghar, February 5, 1874.

*Adult male* (type of species). General colour above light drab-brown, the sides of the back washed with pale pearly grey; wing-coverts pale pearly grey, shaded with brown, the inner, median, and greater coverts being drab-brown like the back; bastard-wing entirely pearly grey; primary-coverts pearly grey, brown on the inner webs; quills dusky brown, the primaries grey at the base and edged with whitish, the inner primaries for the most part grey, with a dusky-brown shade towards the ends of the feathers, which are fringed with white and are ashy whitish along the shaft, the secondaries entirely pearly grey, except the innermost, which are drab-brown like the back; upper tail-coverts pale drab-brown, the long ones ash-grey, brownish at the ends; centre tail-feathers drab-brown, shaded with ashy grey, the next ones grey, shaded with brown externally and white at the end of the inner web, the bases dusky blackish; the white gradually increasing towards the outer feathers, which are white for nearly the terminal half, with a pronounced blackish shade near the base of the inner web; crown of head light pinkish isabelline, with a black collar round the hind neck, the feathers of the nape and lateral black feathers of the collar fringed with pearly grey; lores, sides of face, ear-coverts, cheeks, and under surface of body pinkish isabelline, throat whiter; breast and abdomen, sides of body, flanks, and thighs pale pearly grey, darker ashy on the under tail-coverts, the long coverts being edged with white at the tip; under wing-coverts and axillaries white, shaded with pearly grey; quills below dusky ashy, white on the inner webs. Total length 12·5 inches, culmen from feathers 0·55, wing 7·4, tail 5·7, tarsus 0·8.

This is a large form of *Turtur risorius* which seems to me worthy of recognition as a race.

Dr. Scully gives the following note:—"This Dove is one of the commonest birds in the plains of Eastern Turkestan; it is at least three times more numerous than *Turtur auritus* (when the latter is in the country), and is a permanent resident throughout the year. It is always to be found near villages and houses, perching on trees or running about on the ground and picking up grain and seeds. The birds are very tame, and in winter they would come right up to the door of my room at Yarkand to be fed. A regular colony of these Doves lives about the compound of the Residency at Yarkand, so I could have easily secured any number of specimens had I known that the bird was supposed to be a new species. A favourite trick of the Yarkand boys is to capture one of these Doves and smear its feathers all over with soot mixed with oil. The bird is then allowed to fly away, and after a few days, when the feathers

have shaken into their ordinary positions, the Ringdove presents quite a natural appearance; only, as it moves about with its fellows, it looks truly a dove in mourning. The Turki name for this Dove is 'Pakhtak,' i. e. *Fakhtak*, a Dove (Persian)."

Dr. Stoliczka found this Dove at Yarkand on the 24th of May. He writes:—"I took the nest on a pollard willow about seven feet above the ground. The nest is made of a few twigs outside and has a thick lining of cotton-wool inside. It is large and shallow; eggs two, white."

#### 270. TURTUR AURITUS.

*Turtur auritus* (L.) ; Hume & Henders. Lahore to Yark. p. 278 (1873) ; Blanf. East. Persia, ii. p. 270 (1876) ; Scully, Str. F. iv. p. 177 (1876) ; Bidd. Ibis, 1881, p. 92 ; Scully, ibid. p. 585 ; C. Swinh. Ibis, 1882, p. 117 ; Severtz. Ibis, 1883, p. 71 ; Homeyer & Tancre, MT. orn. Ver. Wien, 1883, p. 91 ; Zarudn. Ois. Transcasp. p. 61 (1885) ; Scully, J. A. S. Beng. lvi. p. 86 (1887) ; Sharpe, Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 84 (1889).

*Columba turtur* (L.) ; Severtz. Turkest. Jevotn. p. 68 (1873).

*Turtur vulgaris*, Eyton ; Dresser, Ibis, 1876, p. 221.

*Peristera turtur*, Radde, Ornith. iii. p. 494 (1887).

No. 1048, juv. Káshghar, December 23, 1873.

No. 1151. Káshghar, December 16, 1873.—Length 11·7 inches, wing 7, tail 4·5, tarsus 0·8 ; expanse 19·5 ; bill from front 0·7, from gape 0·85 ; length of foot 1·9. Iris orange-golden, very narrow ; bill blackish ; feet carmine-red ; naked space round the eye violet-red. Near houses and in low jungle.

No. 1755. Yarkand, May 15–20, 1874.

No. 1776. Yarkand, May 23, 1874.—Length 11·7 inches, wing 7·1, tail 4·75, tarsus 1 ; expanse 20·5 ; bill from front 0·75, from gape 0·9 ; length of foot 1·9, spread 1·75. Iris reddish golden, very narrow ; bill horny black ; feet deep lilac-red. Wings reach within 2 inches of end of tail. "Torolgha" (*Yarkand*) ; "Urrhak" (*Andijani*).

Nos. 1817, 1824. Kárghalik, May 30, 1874.

Dr. Henderson says :—"A single specimen of the European Turtle-Dove was obtained at Oi-tográk on the 28th of August. Doves were comparatively rare in Yarkand, and this was the only species observed. The specimen above referred to was a female, and corresponds with European specimens with which Mr. Hume compared it."

Dr. Scully's note is as follows :—"The Turtle-Dove is a seasonal visitant to the plains of Eastern Turkestan, arriving in May and migrating towards the end of September or the beginning of October ; it was never observed in winter. The Turki name for the Turtle-Dove is 'Turulghu,' evidently a sort of imitation of the bird's coo."

Dr. Stoliczka found it breeding near Yarkand on the 23rd of May. He fancied that the species had a shorter and deeper call than the European Turtle-Dove. It made a thin nest of a few twigs just like that of the latter bird, and had two white eggs.

#### 271. TURTUR SENEGALENSIS.

*Columba aegyptiaca*, Severtz. Turkest. Jevotn. p. 68 (1873).

*Turtur senegalensis*, Dresser, Ibis, 1876, p. 222 ; Blanf. East. Persia, ii. p. 270 (1876).

No. 126. Rhara, Jhelum Valley, July 17, 1873.

No. 1886. Chakmak, January 7, 1884.



272. *TURTUR SURATENSIS*.

*Turtur suratensis* (Gm.) ; Bidd. Ibis, 1881, p. 92 ; Scully, ibid. p. 585 ; Oates' ed. Hume, Nests & Eggs Ind. B. ii. p. 353 (1890).

No. 100. Changligally, Murree, July 6, 1873.

No. 137. Ghari, July 7, 1873.—“Trílpút.”

No. 671. Leh, September 10, 1873.

273. *TURTUR PULCHRATUS*.

*Turtur vitticollis*, Hodgs. ; Hume & Henders. Lahore to Yark. p. 274 (1873).

Nos. 446, 447. Chiliscambo, August 18, 1873.

No. 1683. South of Ighiz Yar, May 18, 1874.

No. 1746. Yarkand, May 15–20, 1874.

Colonel Biddulph shot this species at Drás and Sonámarg in July 1874.

Order PTEROCLETES.

Family PTEROCLIDÆ.

Genus **SYRRHAPTES**.

274. *SYRRHAPTES TIBETANUS*.

*Syrrhaptes tibetanus*, Gould ; Hume & Henders. Lahore to Yark. p. 279 (1873) ; Prjev. in Rowley's Orn. Misc. ii. p. 384 (1877) ; Severtz. Ibis, 1883, p. 71.

No. 772. Chagra, September 9, 1873.

Nos. 797, 798, 799. Gogra, September 25, 1873.

The following note has been sent by Colonel Biddulph :—“I first saw this Sand-Grouse at Chagra, at an elevation of 15,000 feet, where it was common and tame. It was flying about in flocks of from three to ten individuals, on the hillside above the camp. In getting into the Changchenmo Valley again, at an elevation of about 15,000 feet, I saw a few, but did not again notice any Sand-Grouse during our journey, except that I saw some flying overhead in November, between Khushtágh and Oi-tográk (4000 feet) ; and until the day we left Yangi-hissár, on March the 21st, and crossed a sandy plain (4000 feet) towards Ighiz Yar, I failed to secure a specimen of that species. This may have been *S. paradoxus*.”

It is probably to this species, and not to *Pterocles arenarius*, that the following note of Dr. Scully's refers :—“While I was at Yarkand, I often heard of a bird called by the natives ‘*Beghitak*,’ which was said to inhabit sandy desert ground, and often gravelly steppes. It was described as somewhat smaller than a Chicore, of a yellowish-brown colour, like the back of a Turtle-Dove, and having the legs feathered and the three toes partially joined together. The ‘*Beghitak*’ was said to breed in the country, and its blood was reputed a specific for consumption. On the 5th August I first saw this bird near Besharik in open desert ground : two birds rose a long way off before I saw them on the ground, and, as it was after sunset, the only points I learnt about them were that they were very wild, had long pointed wings, a powerful flight, and made a clacking noise like *tuk, tuk, tuk*, frequently repeated.

“Next day I saw three of these birds in waste ground, where a few stunted bushes were growing; they appeared to be yellowish brown above, the breast dove-colour, abdomen dark or black, lower tail-coverts white. Another of these birds was seen on a subsequent occasion in the desert, but this Sand-Grouse (as I believe it to be) was always so wild and wary, that I could not manage to get within shot of it.”

275. *SYRRHAPTES PARADOXUS*.

*Syrrhaptes paradoxus*, Pall.; Severtz. Turkest. Jevotn. p. 68 (1873); Dresser, Ibis, 1876, p. 322; Prjev. in Rowley's Orn. Misc. ii. p. 382 (1877); Homeyer & Tancré, MT. orn. Ver. Wien, 1883, p. 91; Zarudn. Ois. Transcasp. p. 62 (1885).

No. 1699. East of Kizil, May 19, 1874.

A female bird, which Mr. Ogilvie Grant thinks to be not quite mature.

This may be the species seen by Dr. Scully near Besharik in August, which is called “*Beghitak*,” as has been suggested by Mr. Hume in a footnote to ‘Stray Feathers,’ vol. iv. p. 139.

Order GALLINÆ.

Family PHASIANIDÆ.

Genus **PHASIANUS**.

276. *PHASIANUS SHAWI*.

*Phasianus shawi*, Elliot; Scully, Str. F. iv. p. 179 (1876).

Nos. 948, 949, ♂ ♀. Gúma, November 3, 1873.

No. 1071, ♂. Yarkand, November 24, 1873.

No. 1198, ♂. Marálbáshi, January 1874. Sent by the King.

Colonel Biddulph writes to us:—“This species frequents thick grass-jungle, and, according to the natives, never roosts in trees, and I certainly saw it in places where there was no tree to roost in. We first met with it ourselves at a place about 15 miles east of Yarkand. We did not notice it anywhere *en route* to Yarkand, but at Oi-tográk specimens (in the flesh) were brought in, said to have been killed near Gúma, which is on the road to Khoten. On the first march out of Yarkand to Káshghar we again shot specimens; after that we found it on the road from Káshghar to Marálbáshi, at about 60 miles from the former place, and thence on to Marálbáshi. A few were in the jungle, but only where there were nullahs of long grass. At Marálbáshi, where there is a vast expanse of grass, it was very common. They were, however, very wild and shy, and ran like fiends, only rising at considerable distances as a rule, and as, besides this, it was almost impossible to retrieve them in the grass, unless killed dead, I do not think I shot and bagged more than three in any one day; but we used to hawk them with what the people called ‘Katchgais,’ a Goshawk, I think.

“As far as I could make out it occurs as far north, at any rate, as Aksu, generally all over the nearly level, grass-jungle-clad basins of the Khotan, Yarkand, and Káshghar Rivers, east of the road from Sanju to Káshghar. West of this we never met with it.”

Dr. Scully observes:—"This fine Pheasant is a permanent resident in the plains of Eastern Turkestan, frequenting long grass-jungle and reeds growing in waste ground. It is said to occur most plentifully in the Dolan jungle, Makit and Marálbáshi being mentioned as places where it is particularly numerous. However, it is common enough near Káshghar and Yarkand; I know of two rather good places for this Pheasant, one between Yarkand and Kokrabát, and another near Beshkant. The flight of this bird is rather slow, and it commonly goes over the long grass only for a short distance and then drops down. When alarmed the male bird utters a harsh, shrill cry."

Family TETRAONIDÆ.

Genus CACCABIS.

277. CACCABIS CHUKOR.

*Caccabis pallescens*, Hume, Lahore to Yark. p. 283 (1873); Scully, Str. F. iv. p. 182 (1876).

*Caccabis chukor*, Blanf. East. Persia, ii. p. 275 (1876); Prjev. in Rowley's Orn. Misc. ii. p. 425 (1877); Hume & Marshall, Game Birds India, ii. p. 33, pl. v. fig. 1 (1879); Wardlaw Ramsay, Ibis, 1880, p. 70; Bidd. Ibis, 1881, p. 93; Scully, ibid. p. 586; C. Swinhoe, Ibis, 1882, p. 119; Sharpe, Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 87 (1889).

*Perdix chukar*, Homeyer & Tancreé, MT. orn. Ver. Wien, 1883, p. 91; Zarudn. Ois. Transcasp. p. 64 (1885).

No. 92. Dungagally, July 4, 1873.

No. 275. Kangan, August 7, 1873.

No. 1586. Jungalik, April 27, 1874.

This is, to my mind, merely a slightly paler race of the ordinary Himalayan Chukor. Mr. Hume hardly claims for it more than this distinction, but I cannot see that it deserves even a specific name. The type of *C. pallescens* was procured by Dr. Henderson at Kharbu in Ladák.

Although one might have expected the Jungalik bird to have been *C. pallescens*, it cannot be so placed. In fact it is intermediate, being darker than *C. pallescens*, but not so dark as *C. chukor*. My colleague, Mr. Ogilvie Grant, who has studied these Partridges, tells me that he believes that there is a perfect gradation in depth of colour between the two above-named races.

278. CACCABIS PALLIDUS.

*Caccabis pallidus*, Hume, Lahore to Yark. p. 284 (1873); Scully, Str. F. iv. p. 183 (1876).

Nos. 487, 488, pull. Shargol, August 21, 1873 (Afzul Khan).

No. 519. Lamaguru, August 23, 1873.

No. 630. Leh, September 4, 1873.

No. 881. Kiwaz, October 26, 1874 (*Col. Gordon*).

No. 1183. Chakmak, January 3, 1874.

No. 1185. Chakmak, January 4, 1874.

No. 1420. Chehil Gombaz, March 25, 1874.

Nos. 1851, 1852. S. Kugiár, June 2, 1874.

Mr. Hume first described this species, but afterwards, in the 'Game Birds of India,' he came to the conclusion that it was not separable from *C. chukor*, the Trans-Himalayan range of which he gives as "spread throughout the northern ranges, the so-called Karakorum or Kuen-luen, and right across Káshghar to the Tian Shan, throughout which it occurs." On reviewing the series procured by Dr. Stoliczka, however, the uniformly pale tint of the Central-Asian birds is very recognizable, and I think that it should be kept separate. Mr. Ogilvie Grant tells me that he believes that a complete gradation in colour will be found to exist between the Himalayan and the Yarkand Partridges, and he is inclined to regard the two birds as climatic forms of the same species.

Colonel Biddulph sends us the following note:—"I shot one in some jungle between Káshghar and Marálbáshi, and there were some also in the latter place, but they are not very common in the Plains country. In all the Hills, however, south and west of Turkestan, up to, at any rate, 12,000 feet, they are very common. In the valley between Panjah and Sarhad in Wakhán they are specially abundant, and people hawk them."

Dr. Henderson states that in Yarkand this Partridge swarms (wherever the rivers debouch into the plains) over a belt of country some ten or fifteen miles in width. He gives an account of their mode of capture.

"Chicore appear to abound," says Dr. Scully, "in all the hills which surround the plains of Kashgharia on the north, west, and south. In the winter the birds seem to come down to lower elevations than they frequent in summer. The Turki name for the Chicore is '*Keklik*.'"

Ten eggs of this species, out of one nest, were brought to Dr. Stoliczka at Beshterek on the 31st of May.

#### Genus **COTURNIX.**

##### 79. **COTURNIX COTURNIX.**

*Coturnix communis*, Bonn.; Hume & Henders. Lahore to Yark. p. 285 (1873); Scully, Str. F. iv. p. 184 (1876); Blanf. East. Persia, ii. p. 278 (1876); Dresser, Ibis, 1876, p. 323; Prjev. in Rowley's Orn. Misc. ii. p. 424 (1877); Bidd. Ibis, 1881, p. 92; Scully, ibid. p. 586; Homeyer & Tancreé, MT. orn. Ver. Wien, 1883, p. 92; Scully, J. A. S. Beng. lvi. p. 87 (1887).

*Coturnix vulgaris*, Severtz. Turkest. Jevotn. p. 68 (1873).

*Ortygion coturnix*, Radde, Ornis, iii. p. 495 (1887).

No. 1271, ♂. Káshghar, January 25, 1874.—Bill dull pale bluish; feet pale yellow, claws violet; iris hazel-brown. Length 8·0 inches, wing 4·5, tail 1·9, tarsus 1·2.

No. 1323. Káshghar, February 9, 1874.

Colonel Biddulph writes:—"We shot this Quail in the plains of Turkestan in November and January, and I heard them calling in May and June. We were told that at that season they were very abundant there." Dr. Henderson procured a specimen on the 24th of September at the Karatágh Lake (13,500 feet).

Dr. Scully says:—"The Quail seems to be a permanent resident in the plains of Kashgharia; I got two birds at Yarkand in February, and the Shikaris were positive that the bird was to be met with throughout the winter. In summer the birds were common in the fields about Yarkand, though not very numerous. The Turki name for this species is '*Budinah*,' but the common people generally call it '*Watwalak*.'"

Dr. Stoliczka writes in his 'Diary':—"Kugíár, June 1st. *C. communis* is certainly rare in summer and goes probably further north, returning here in autumn or at least passing through. It is said to be very common in Andiján during the summer. I heard only a single Quail calling when coming out of Kárgalik yesterday morning."

Genus **TETRAOGALLUS.**

280. **TETRAOGALLUS TIBETANUS.**

*Tetraogallus tibetanus*, Gould; Hume & Henders. Lahore to Yark. p. 281 (1873); Scully, Str. F. iv. p. 182 (1876); Prjev. in Rowley's Orn. Misc. ii. p. 427 (1877).

Colonel Biddulph procured a female specimen in the Sakti Pass on the 15th of September. He says:—"This is the only occasion on which I shot a specimen of this species. Crossing the Lankar Pass (Marsemik) a few days later, I saw others, probably of this species." Dr. Stoliczka says that it was common in the Kaskasu Pass on the 26th of March.

Dr. Scully writes:—"I shot my first specimen of this species on the 24th September 1874 near the top of the Sanju Pass, at an elevation of 16,000 feet. Next day I saw hundreds of the birds in a side valley near Kichik Yailak, where they afforded me good shooting. They associated in coveys of about ten to twenty, and were not very shy. When approached from below they moved leisurely up hill, stopping every now and then to look at one; but when shot at or alarmed they flew downwards very swiftly, uttering a pleasant musical whistle. I found their flesh most delicious eating. Numbers of these birds were brought to us alive, during the winter, at Káshghar (where a specimen was preserved) and at Yarkand; they were very tame in confinement. Both this species and the preceding one had evidently sought the lower hills near the plains when winter set in. The Turki name for the bird is 'Ular,' and they are said to be found in all the hills which bound Eastern Turkestan on the north, west, and south."

281. **TETRAOGALLUS HIMALAYENSIS.** (Plate XV.)

*Tetraogallus himalayensis* (Gray); Hume & Henders. Lahore to Yark. p. 280 (1873); Scully, Str. F. iv. p. 181 (1876); Bidd. Ibis, 1881, p. 93; Scully, ibid. p. 586; Severtz. Ibis, 1883, p. 72; Scully, J. A. S. Beng. lvi. p. 86 (1887).

No. 843. Sháhidúla, November 21, 1873 (*Mr. Forsyth*).

In his 'Diary' Dr. Stoliczka writes:—"Sasstekke, May 16. Hyder Mahomed got five Ular eggs for me. The bird makes its nest of grass &c. high up between rocks."

The specimen preserved by Dr. Stoliczka is much paler than any of the Himalayan birds in the National Collection, and it may ultimately be found desirable to separate the Central Asian bird as a subspecies or race.



## Order PLATALEÆ.

## Family IBIDIDÆ.

Genus **PLEGADIS**.282. **PLEGADIS FALCINELLUS**.

*Ibis falcinellus* (L.) ; Severtz. Turkest. Jevotn. p. 68 (1873) ; Dresser, Ibis, 1876, p. 326 ; Blanf. East. Persia, ii. p. 298 (1876).

*Falcinellus igneus*, C. Swinh. Ibis, 1882, p. 123.

*Plegadis falcinellus*, Oates in Hume's Nests and Eggs Ind. B. iii. p. 231 (1890).

No. 1531. Panjah, April 14-23, 1874.

## Order HERODIONES.

## Family ARDEIDÆ.

Genus **ARDEA**.283. **ARDEA CINEREA**.

*Ardea cinerea*, L. ; Hume & Henders. Lahore to Yark. p. 295 (1873) ; Dresser, Ibis, 1876, p. 325 ; Scully, Str. F. iv. p. 196 (1876) ; Prjev. in Rowley's Orn. Misc. iii. p. 48 (1878) ; Bidd. Ibis, 1881, p. 99 ; Scully, ibid. p. 591 ; C. Swinh. Ibis, 1882, p. 123 ; Severtz. Ibis, 1883, p. 72 ; Zarudn. Ois. Transcasp. p. 71 (1885) ; Radde, Orn. iii. p. 497 (1887).

*Ardea cinerea*, var. *brag*, Isid. Geoffr. ; Severtz. Turkest. Jevotn. p. 68 (1873).

No. 177. Wular Lake, Kashmir, July 26, 1873.—“Brag.”

Colonel Biddulph procured a specimen at Baramula. He writes to us:—“I saw this species between Sanju and Yarkand and in the swamps round the latter place.” Dr. Stoliczka found it breeding on a jheel near Yarkand on the 22nd of May.

Dr. Henderson says that this species was very common about Srinagar, where there is a large heronry.

“Four specimens of this species,” writes Dr. Scully, “were preserved at Yarkand in January and February. This Heron was common about Káshghar and Yarkand during the whole winter, frequenting swampy ground and the neighbourhood of unfrozen bits of water. It was not seen near Yarkand from April to August ; but in the latter month numbers of these birds were met with at Tungtash near Kárgchalik, among reeds growing near water. Again, on the 26th of August a flock of these birds (? migrating) was seen near the Karakásh River below Gulgun Shah. The Yarkandis say that this bird is a permanent resident in the country, moving northwards in summer to the country about Marálbáshi, where it breeds, and that it feeds chiefly on frogs and fish. The Turki name for the species is ‘*Ukar*’ or ‘‘*Ukar*.’”

Genus **HERODIAS**.

284. **HERODIAS ALBA**.

*Ardea alba*, L.; Severtz. Turkest. Jevotn. p. 68 (1873); Dresser, Ibis, 1876, p. 325; Blanf. East. Persia, ii. p. 295 (1876); Prjev. in Rowley's Orn. Misc. iii. p. 49 (1878); C. Swinh. Ibis, 1882, p. 123.  
*Herodias alba*, Scully, Str. F. iv. p. 196 (1876).

No. 1275. Káshghar, January 21, 1874.—Orbital skin green; feet dark brown.

Dr. Scully observes:—"In winter this species was more common about Káshghar (where four birds were shot) and Yarkand than *Ardea cinerea*. It was never seen in spring or summer, having then, it was reported, migrated northwards, towards Aksu, to breed. It frequented marshy places and the banks of small streams, feeding on fish. The Turki name for this species (which Mr. Hume informs me is the large European form and not the Lesser White Heron of India) is 'Ak Ukar,' 'White Heron.'"

Genus **ARDETTA**.

285. **ARDETTA MINUTA**.

*Ardetta minuta* (L.); Hume & Henders. Lahore to Yark. p. 296 (1873); Severtz. Turkest. Jevotn. p. 68 (1873); Dresser, Ibis, 1876, p. 326; Blanf. East. Persia, ii. p. 296 (1876); Bidd. Ibis, 1881, p. 99; Scully, t. c. p. 592; Severtz. Ibis, 1883, p. 72.  
*Ardeola minuta*, Zarudn. Ois. Transcasp. p. 71 (1885).

Nos. 186, 190, 192, 196, 197, ad. Srinagar, July 28, 1873.

No. 205, ad. Srinagar, July 29, 1873.

Nos. 212, 251, ad. Srinagar, August 3, 1873.—Length 16·5 inches, wing 5·9, tail 1·9, tarsus 1·65; expanse 20·0. Iris bright orange, with a yellow ring round the pupil; bill brownish above, yellowish green at the sides; sides of face and eyelids green; feet green, the soles yellow. Kashmir name "Goi."

No. 996, young. Yarkand, November 11, 1873.

Colonel Biddulph says:—"I only saw it at Srinagar, but never noticed it in Yarkand." Dr. Henderson says that it was excessively common in the lakes and marshes of Kashmir, where it was breeding in June.

Genus **NYCTICORAX**.

286. **NYCTICORAX GRISEUS**.

*Nycticorax griseus* (L.); Hume & Henders. Lahore to Yark. p. 296 (1873); Bidd. Ibis, 1881, p. 99; Scully, t. c. p. 592.  
*Nyctiardea nycticorax*, Oates in Hume's Nests & Eggs Ind. B. iii. p. 258 (1890).

According to Dr. Henderson, common in the lower valley of Kashmir.

Genus **BOTAURUS**.287. **BOTAURUS STELLARIS**.

*Botaurus stellaris* (L.) ; Severtz. Turkest. Jevotn. p. 68 (1873) ; Dresser, Ibis, 1876, p. 325 ; Scully, Str. F. iv. p. 196 (1876) ; Blanf. East. Persia, ii. p. 297 (1876) ; Prjev. in Rowley's Orn. Misc. iii. p. 50 (1878) ; C. Swinh. Ibis, 1882, p. 123 ; Sharpe, Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 90 (1889).

No. 1176. Káshghar, December 23, 1873.—“Koelbuka.” Bought by Dr. Bellew in the bazaar.

Dr. Scully's note is as follows :—“Four specimens of the Bittern were preserved: a female at Káshghar in December, a male at Beshkant in February, and two males at Yarkand in the same month. This species was tolerably common near Káshghar and Yarkand during the winter, frequenting swampy ground covered with rushes. It was not noticed in spring or summer; but Mr. Shaw purchased a young bird of the year about the middle of July, which would seem to prove that this bird does not breed far from Yarkand, at any rate. I kept several of these birds in confinement, and found that their favourite attitude was with the beak directed straight up in the air, the eyes looking very vacant, and the whole body kept still and unmoved; when made to walk about the room they would shake out their neck-feathers and look very fierce. The natives said that one required to be very careful in handling these birds, as they were very fond of making a peck straight at one's eye: a wild hare kept in the same room with a Bittern died one night, and next morning one of its eyes was found very neatly picked out; my servant looked on this incident as a striking confirmation of the eye-extracting tendencies of the bird. The Yarkandis call this species ‘*Kul bughasi*,’ the ‘Stag of the Lake,’ and say that it is a permanent resident in the country, breeds in long grass-jungle, and makes a very loud booming noise *by sticking its bill into a reed!*”

## Family CICONIIDÆ.

Genus **DISSURA**.288. **DISSURA EPISCOPUS**.

*Melanopelargus episcopus* (Bodd.) ; Hume & Henders. Lahore to Yark. p. 294 (1873).  
*Dissura episcopus*, Oates in Hume's Nests & Eggs Ind. B. iii. p. 268 (1890).

Dr. Henderson states that he saw this Stork in the plains of Yarkand on several occasions, especially in the neighbourhood of Yarkand itself. No specimen was preserved, and none of the other expeditions met with the species.

## Order STEGANOPODES.

## Family PHALACROCORACIDÆ.

Genus **PHALACROCORAX**.

## 289. PHALACROCORAX CARBO.

*Carbo phalacrocorax*, var. *continentalis*, Severtz. Turkest. Jevotn. p. 114 (1873).

*Graculus carbo*, L.; Scully, Str. F. iv. p. 204 (1876); Prjev. in Rowley's Orn. Misc. iii. p. 146 (1878).

*Phalacrocorax carbo* (L.); Blanf. East. Persia, ii. p. 298 (1876); Dresser, Ibis, 1876, p. 415; Scully, Ibis, 1881, p. 594; Severtz. Ibis, 1883, p. 77; Zarudn. Ois. Transcasp. p. 72 (1885); Scully, J. A. S. Beng. lvi. p. 88 (1887).

Dr. Scully writes as follows:—"This Cormorant is, I believe, a permanent resident in Kashgharia—in the plains. The first specimen was obtained on the banks of the Yarkand River, near Tarim Langar. In the beginning of August I found these birds quite common at Tungtash, near Kárghalik. They were then nearly always seen in parties of five, sitting on the top of a mud cliff—often thirty feet high—immediately overlooking the water below, one of the party acting as sentinel. The favourite posts of the Cormorants could be easily recognized about the place—spots worn into a sort of dome shape by their tails, and always near the edge of the cliff. In sitting these birds rest on their feet and the stiff feathers of their tails, the tail being spread out to form a sort of hollow half-cone. When they fly the neck is stretched forward like a goose. On one occasion I saw a Cormorant sitting near the water's edge, apparently watching intently for a fish; I shot the bird just as it rose, and it immediately dived into the water, reappearing again, however in a few seconds as it was mortally wounded. The Turki name for this Cormorant is 'Kara Ghaz,' 'the Black Goose.'"

## Order ANSERES.

## Family ANATIDÆ.

## Subfamily ANSERINÆ.

Genus **CYGNUS**.

## 290. CYGNUS OLOR.

*Cygnus olor*, Gm.; Severtz. Turkest. Jevotn. p. 70 (1873); Dresser, Ibis, 1876, p. 416; Scully, Str. F. iv. p. 197 (1876); Prjev. in Rowley's Orn. Misc. iii. p. 99 (1878).

"The Swan," writes Dr. Scully, "was often mentioned to me as being plentiful in Lob and towards Aksu; captive individuals of this species were seen at Káshghar in November, swimming in a pond at the Shrine of Hazrat Apak. The Turki name for the species is 'Koday.'"

Genus **ANSER**.291. **ANSER ALBIFRONS.**

*Anser albifrons*, Bechst.; Severtz. Turkest. Jevotn. p. 70 (1873); Dresser, Ibis, 1876, p. 418; Blanf. East. Persia, ii. p. 303 (1876); Hume & Marsh. Game Birds Ind. iii. p. 73.

Nos. 1319, 1320. Káshghar, February 1874. "Sent by the King."

292. **ANSER CINEREUS.**

*Anser cinereus*, Meyer; Severtz. Turkest. Jevotn. p. 70 (1873); Dresser, Ibis, 1876, p. 418; Scully, Str. F. iv. p. 197 (1876); Prjev. in Rowley's Orn. Misc. iii. p. 95 (1878); Zarudn. Ois. Transcasp. p. 72 (1885).

Colonel Biddulph writes to us:—"There was a large swamp outside Yarkand, in which, when we arrived in November, there were huge flocks of this species; but I never saw it anywhere else, and they were not about Káshghar anywhere during the winter."

Dr. Scully has published the following note:—"The Grey Lag Goose is a seasonal visitant to Kashgharia, where it breeds. The first specimen of this species which I got was shot near Yarkand on the 28th February; in the early part of March they were often seen flying over the Fort at Yarkand and going straight north. The bird is said to breed plentifully near Marálbáshi, but not in the immediate vicinity of Yarkand; young birds were captured about the beginning of June. Two eggs of *Anser cinereus* (laid by a captive bird with cut wings) were obtained on the 1st and 12th of June. They are spotless white, with an ivory tinge; glossless or faintly glossy in parts, and of a compact texture. In shape they are moderately long ovals, broadest about the centre, and measure 3·37 by 2·33 and 3·21 by 2·21. It was curious to observe how readily birds of this species got tame; even old birds, who had only had their wings broken by a bullet, soon became quite friendly and familiar. The Turks call this Goose by the Persian name '*Ghaz*.'"

293. **ANSER INDICUS.**

*Anser indicus* (Lath.); Dresser, Ibis, 1876, p. 419; Prjev. in Rowley's Orn. Misc. iii. p. 97 (1878); Bidd. Ibis, 1881, p. 99; Hume & Marsh. Game Birds Ind. iii. p. 81 (1880); Severtz. Ibis, 1883, p. 76.

*Anser skorniakovi*, Severtz. Turkest. Jevotn. pp. 70, 149 (1873).

No. 1594. Aktásh, May 5, 1874.

Colonel Biddulph says:—"I saw this on the small Pámir Lakes on our way back in May, and also all along the Aktásh stream in the same month, but cannot remember observing them anywhere else on the journey."

Subfamily *ANATINÆ*.Genus **TADORNA**.294. **TADORNA CASARCA.**

*Casarca rutila* (Pall.); Hume & Henders. Lahore to Yark. p. 296 (1873); Blanf. East. Persia, ii. p. 303 (1876); Scully, Str. F. iv. p. 198 (1876); Prjev. in Rowley's Orn. Misc. iii. p. 100 (1878); Hume



& Marsh. Game Birds of India, iii. p. 123 (1880); Bidd. Ibis, 1881, p. 99; C. Swinh. Ibis, 1882, p. 124; Scully, J. A. S. Beng. lvi. p. 89 (1887); Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 91 (1889).  
*Anas rutila*, Severtz. Turkest. Jevotn. p. 70 (1873).  
*Tadorna rutila*, Dresser, Ibis, 1876, p. 419.  
*Tadorna casarca* (L.); Severtz. Ibis, 1883, p. 76; Oates in Hume's Nests and Eggs, iii. p. 286 (1890).

Dr. Henderson writes:—"The Brahminy Duck or Ruddy Sheldrake was first noticed at the hot springs above Gokra, at an elevation of 16,000 feet; there they were seen on the small lakes at the salt plain, and all along the Karakásh River. The young were at that time (July) scarcely able to fly; when approached, the mother made them all dive by swimming and flapping on to each of them as soon as it showed itself above the water. The mother also pretended to be wounded, and lay on the water every now and then, with wings spread out as if unable to fly. All along the Karakásh Valley, and also on the high table-land wherever there was water overhung by cliffs, there numbers of Brahminy Ducks with broods of young ones were seen, and holes in these cliffs plastered over with droppings were pointed out by the Kirghiz as the places in which they had bred. The local name is 'ngooroo ngaugpa.'"

Dr. Scully gives the following note:—"The Ruddy Sheldrake was observed in the plains of Kashgharia in the beginning of winter, and from March to August it was exceedingly plentiful in the lakes and swamps of Sughuchak, near Yarkand. Many young birds were unable to fly, usually swimming about with the old female bird. In July I saw a party of about ten of these Ducks among some rushes; they had a sentinel bird placed at some little distance from the main flock, and on seeing me approach he gave a sort of warning cry which seemed to put his party on the alert; when I got a few steps nearer the watcher gave a loud scream and flew up, followed by the rest of the party. This bird seems to walk very easily on dry land, and always in a curiously erect manner. The Yarkandis say that this species migrates to India in winter, and that the eggs are laid in some dry place away from water; as soon as the young bird emerges from the egg, the mother seizes it and puts it into the water. The Turki name for the Brahminy Duck is '*Hangghut*,' pronounced 'Hangat.'"

Colonel Biddulph noticed one of these Sheldrakes going into a hole in precipitous cliffs about a hundred feet above the Sarikol plain on the 11th of May, and believes that the species was breeding there.

#### Genus **BRANTA**.

##### 295. **BRANTA RUFINA**.

*Branta rufina* (Pall.); Scully, Str. F. iv. p. 201 (1876); Bidd. Ibis, 1881, p. 100; Hume & Marsh. Game-Birds of India, iii. p. 253, pl. 34; Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 90 (1889).  
*Fuligula rufina*, Severtz. Turkest. Jevotn. p. 70 (1873); Dresser, Ibis, 1876, p. 421; Blanf. East. Persia, ii. p. 301 (1876); C. Swinh. Ibis, 1882, p. 125.

Met with by Dr. Scully, who says that it was not observed in winter, but was very common near Yarkand during the summer. It is only a seasonal visitant to Kashgharia, where it breeds. The Turki name is "*Kizil bash aurdak*," i. e. the "Red-headed Duck."

Genus **CLANGULA**.296. **CLANGULA GLAUCION**.

*Clangula glaucion*, Severtz. Turkest. Jevotn. p. 70 (1873); Dresser, Ibis, 1876, p. 421; Blanf. East. Persia, ii. p. 302 (1876); Hume & Marsh. Game Birds of India, iii. p. 285, pl. 38 (1880); Scully, J. A. S. Beng. lvi. p. 89 (1887); Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 91 (1889).

*Bucephalus clangula*, Prjev. in Rowley's Orn. Misc. iii. p. 106 (1878).

No. 1318, ♀. Káshghar, February 1874. (Sent by the King.)

Nos. \*1591, 1592, ♂. Lake Sirikul, Pámir, May 1, 1874.—\*Sex, male. Length 18·7 inches, wing 9·35, tail 4, tarsus 1·65; expanse 32; bill from front 1·3, from gape 2·1. Iris yellow; bill greenish black; feet reddish yellow, soles silky brown. Middle toe 2·9, hind toe 0·8.

Genus **ANAS**.297. **ANAS BOSCHAS**.

*Anas boschas*, L.; Severtz. Turkest. Jevotn. p. 70 (1873); Dresser, Ibis, 1876, p. 419; Blanf. East. Persia, ii. p. 300 (1876); Scully, Str. F. iv. p. 199 (1876); Prjev. in Rowley's Orn. Misc. iii. p. 101 (1878); C. Swinh. Ibis, 1882, p. 124; Zarudn. Ois. Transcasp. p. 72 (1885).

*Anas boschas*, Bidd. Ibis, 1881, p. 99; Scully, t. c. p. 592.

No. 1169, ♂. Káshghar, December 20, 1873. (*Captain Trotter*.)

Nos. 1199, 1200, ♂ ♀. Káshghar, January 1874. (Sent by the King.)

"The Mallard," writes Dr. Scully, "occurs in great numbers in Kashgharia during the whole winter, when it is decidedly the commonest of the Duck tribe. In spring and summer it seemed to be less plentiful; but this may perhaps have been because it was cast in the shade by the great variety of other Ducks and Teal then breeding about Yarkand. The Yarkandis say that of the twenty odd species of Duck which they discriminate, the Mallard is the only permanent resident in the vicinity of Káshghar and Yarkand, breeding in April. The Turki name of the Mallard is '*Aurdak*,' which means simply 'Duck,' and it is sometimes distinguished as '*Sun*' or *Suna aurdak*.'"

Dr. Stoliczka found this species breeding in the jheel near Yarkand on the 24th of May.

Genus **QUERQUEDULA**.298. **QUERQUEDULA CRECCA**.

*Anas crecca*, Severtz. Turkest. Jevotn. p. 70 (1873); Dresser, Ibis, 1876, p. 419; Scully, Ibis, 1881 p. 593; Severtz. Ibis, 1883, p. 76; Scully, J. A. S. Beng. lvi. p. 88 (1887).

*Querquedula crecca*, Hume & Henders. Lahore to Yark. p. 297 (1873); Dresser, Ibis, 1876, p. 419; Blanf. East. Persia, ii. p. 301 (1876); Scully, Str. F. iv. p. 200 (1876); Prjev. in Rowley's Orn. Misc. iii. p. 104 (1878); Hume & Marshall, Game Birds of India, iii. p. 205, pl. 27 (1880); Bidd. Ibis, 1881, p. 100; C. Swinh. Ibis, 1882, p. 124; Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 91 (1889).

No. 827, ♀. Sháhídúla, October 19, 1873.

No. 1532, ♀. Panjah, April 14-23, 1874.

"The Common Teal," writes Dr. Henderson, "was never seen either on the way to or in Yarkand; the first specimen was met with on the return journey, near the hot springs at

Gokra, at an elevation of between 15,000 and 16,000 feet. Later, in October, they were seen on the Indus, near Leh, and at Kargil, also in Ladák. Probably this species does not breed so far south as Yarkand, and the birds seen on the return journey were doubtless migrating to their winter-quarters in Hindostan."

Dr. Scully's note is as follows:—"The Common Teal was only obtained at Káshghar in November, at Sughuchak near Yarkand, by Mr. Shaw, in January, and at Beshkant in the beginning of February. I was told that it migrated northwards to breed. The Turki name given for this species was '*Ala bash kurak aurdak*,' which means the 'Mottle-headed Patchwork Duck.'"

299. *QUERQUEDULA CIRCIA*.

*Anas querquedula*, Severtz. Turkest. Jevotn. p. 70 (1873).

*Querquedula circia*, Dresser, Ibis, 1876, p. 419; Blanf. East. Persia, ii. p. 301 (1876); Scully, Str. F. iv. p. 201 (1876); Prjev. in Rowley's Orn. Misc. iii. p. 103 (1878); Bidd. Ibis, 1881, p. 100; C. Swinh. Ibis, 1882, p. 125; Severtz. Ibis, 1883, p. 76; Menzb. Ibis, 1885, p. 358.

*Anas circia*, Scully, Ibis, 1881, p. 593.

No. 652, ♀. Leh, September 9, 1873.

No. 794, ♀. Pamsal, September 23, 1873.

No. 1526, ♂. Panjah, April 14-23, 1874.

Colonel Biddulph shot a male in breeding-plumage on the 8th of May, 1874, and he says that this was the only occasion on which he observed the species. Dr. Scully states that this Teal was common near Yarkand, in summer, where it doubtless breeds. The Turki name given to it is "*Karak aurdak*," or "Patchwork Duck."

Genus **DAFILA**.

300. *DAFILA ACUTA*.

*Anas acuta*, Severtz. Turkest. Jevotn. p. 70 (1873); Scully, Ibis, 1881, p. 593.

*Dafila acuta* (L.); Scully, Str. F. iv. p. 200 (1876); Blanf. East. Persia, ii. p. 301 (1876); Dresser, Ibis, 1876, p. 420; Prjev. in Rowley's Orn. Misc. iii. p. 101 (1878); Bidd. Ibis, 1881, p. 100.

Dr. Scully's note is as follows:—"The Pintail Duck was occasionally seen near Yarkand in March, but only one specimen (a female) was obtained. Two experienced Yarkandi bird-catchers gave me the following information about this species:—The male bird is '*ala*,' i. e. pied, black and white; it is a seasonal visitant only to Eastern Turkestan, arriving in spring, and migrating to Hindostan at the beginning of winter, and it breeds in the neighbourhood of Marálbáshi, laying from ten to twelve eggs. It is called in Turki '*Cha sughsu aurdak*.'"

Genus **CHAULELASMUS**.

301. *CHAULELASMUS STREPERUS*.

*Chaulelasmus streperus* (L.); Hume & Henders. Lahore to Yark. p. 296 (1873); Dresser, Ibis, 1876, p. 419; Prjev. in Rowley's Orn. Misc. iii. p. 105 (1878); Hume & Marsh. Game Birds of India, iii. p. 181, pl. 24 (1880); Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 91 (1889).

*Anas strepera*, Severtz. Turkest. Jevotn. p. 70 (1873); Blanf. East. Persia, ii. p. 301 (1876); C. Swinh. Ibis, 1882, p. 124; Menzb. Ibis, 1885, p. 357; Scully, J. A. S. Beng. lvi. p. 88 (1887).

Two Gadwalls were killed by Dr. Henderson on the 31st of October at Gánderbál in Kashmir, and many others were seen at the same time. They were not previously noticed.

Genus **SPATULA**.

302. **SPATULA CLYPEATA**.

*Anas clypeata*, Severtz. Turkest. Jevotn. p. 70 (1873); id. Ibis, 1883, p. 76.

*Spatula clypeata*, Dresser, Ibis, 1876, p. 240; Blanf. East. Persia, ii. p. 301 (1876); Scully, Str. F. iv. p. 199 (1876); Prjev. in Rowley's Orn. Misc. iii. p. 105 (1878); Bidd. Ibis, 1881, p. 99; Scully, ibid. p. 592; Hume & Marsh. Game Birds of India, iii. p. 142, pl. 19 (1880); C. Swinh. Ibis, 1882, p. 124; Zarudn. Ois. Transcasp. p. 72 (1885); Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 91 (1889).

No. 1171, ♀. Káshghar, December 20, 1873.

No. 1174, ♀. Káshghar, December 22, 1873.

No. 1448, ♂. Tashkúrgán, March 31, 1874.

No. 1530. Panjah, April 14-23, 1874.

Dr. Scully writes:—“Two specimens of the Shoveller, a female and a male, were preserved at Káshghar in November and December. According to Yarkandi accounts very few of these birds remain in the country during the winter, the vast majority of them migrating to India. They breed during the summer in the north of Kashgharia, about the neighbourhood of Marálbáshi, and are said to collect for a short time near Yarkand, when the cold sets in, previous to their migration southwards. The Turki name for the species is given as ‘*Kanak aurdak*.’”

Genus **FULIGULA**.

303. **FULIGULA FERINA**.

*Fuligula ferina*, Severtz. Turkest. Jevotn. p. 70 (1873); Dresser, Ibis, 1876, p. 420; Blanf. East. Persia, ii. p. 302 (1876).

*Aythya ferina*, Prjev. in Rowley's Orn. Misc. iii. p. 106 (1878).

No. 1442, ♀. Tashkúrgán, March 31, 1874.

Genus **NYROCA**.

304. **NYROCA FERRUGINEA**.

*Fuligula leucophthalma*, Severtz. Turkest. Jevotn. p. 70 (1873).

*Nyroca ferruginea*, Dresser, Ibis, 1876, p. 421.

*Fuligula nyroca*, Blanf. East. Persia, ii. p. 302 (1876); Scully, Ibis, 1881, p. 593; Severtz, Ibis, 1883, p. 77; Menzbier, Ibis, 1885, p. 358; Scully, J. A. S. Beng. lvi. p. 89 (1887).

*Aythya nyroca* (Göld.); Hume & Henders. Lahore to Yark. p. 297 (1873); Scully, Str. F. iv. p. 202 (1876).

Dr. Scully says:—“This species is very common during the summer near Yarkand, where it arrives about March, migrating again southwards at the beginning of winter. It breeds in Eastern Turkestan, laying in May or June, and is often seen flying about in pairs. The Turki name for this Duck is ‘*Chiki (or Chikit) kanat aurdak*,’ the word ‘*Chikit*’ having some reference to the white speculum edged with black.”

Observed by Dr. Henderson in Kashmir (on the lakes in which it breeds) both on the upward and downward journey.

Subfamily *MERGINÆ*.

Genus **MERGUS**.

305. **MERGUS MERGANSER**.

*Mergus merganser*, Severtz. Turkest. Jevotn. p. 70 (1873); Dresser, Ibis, 1876, p. 421; Prjev. in Rowley's Orn. Misc. iii. p. 107 (1878).

*Mergus castor*, Hume & Henders. Lahore to Yark. p. 297 (1873); Scully, Str. F. iv. p. 202 (1876); Bidd. Ibis, 1881, p. 101.

No. 721, ♀ ad. Tanksi, September 16, 1873.

No. 831, ♂ juv. Upper Karakásh, October 1873.

No. 1590, ♂ ad. Lake Sirikul, May 1, 1874.—Length 25 inches, wing 11·8, tail 5·2, tarsus 2; expanse 38; bill from gape 2·8, from front 2; middle toe 2·9, hind toe 0·75. Iris dark brown; bill black, red at upper sides and base; feet coral-red.

In his 'Diary' Dr. Stoliczka refers to the occurrence of the present species in the Pámir, where he saw a good number in Lake Sirikul. It is probably one of the species said to breed round the lake.

A young, half-fledged Merganser was caught in the Indus near Leh, in July, by Dr. Henderson on his up journey.

Colonel Biddulph shot a female specimen at Cuchot on the Indus River in September 1872, and states that he saw the bird at Tashkúrghán in Sarikol, where one of the feeders of the Yarkand River broadens out into a wide shallow.

Dr. Scully writes:—"A specimen of this Merganser was preserved at Káshghar on the 30th of October, and it was tolerably common on the rivers near Káshghar during the months of November and December. The natives said that it fed entirely on fish and water-insects, and that it migrated eastward to the lake region of Lob. Its Turki name is '*Ala ghaz aurdak*,' i. e. the Variegated Goose-Duck."

Genus **MERGELLUS**.

306. **MERGELLUS ALBELLUS**.

*Mergus albellus*, Severtz. Turkest. Jevotn. p. 70 (1873); Dresser, Ibis, 1876, p. 421; Blanf. East. Persia, ii. p. 303 (1876); Prjev. in Rowley's Orn. Misc. iii. p. 108 (1878); Severtz. Ibis, 1883, p. 76; Scully, J. A. S. Beng. lvi. p. 89 (1887).

*Mergellus albellus*, Scully, Str. F. iv. p. 202 (1876); Hume & Marsh. Game Birds of India, iii. p. 293, pl. 39 (1880); C. Swinh. Ibis, 1882, p. 125; Sharpe, Trans. Linn. Soc. (2) Zool. v. p. 92 (1889).

No. 1177, ♀. Káshghar, December 24, 1873.

Stated in Dr. Stoliczka's diary to have been caught with a Hawk. Dr. Scully writes:—"The Smew was occasionally seen near Yarkand in the winter, but only one specimen, a female, was obtained in February, near the Yarkand River, which was then completely frozen over."



## Order GAVIÆ.

## Family LARIDÆ.

Genus **LARUS**.307. **LARUS ICHTHYAETUS.**

*Gavia ichthyaetus* (Pall.), Severtz. Turkest. Jevotn. p. 70 (1873).

*Larus ichthyaetus*, Dresser, Ibis, 1876, p. 415; Blanf. East. Persia, ii. p. 292 (1876); Saunders, P. Z. S. 1878, p. 198; Prjev. in Rowley's Orn. Misc. iii. p. 109 (1878).

No. 1175. Káshghar, December 23, 1873. "Sent as a present from the King."

No. 1529. Panjah, April 14, 1874.

Both are immature specimens, attaining the adult grey plumage.

308. **LARUS BRUNNEICEPHALUS.**

*Xema brunneicephala* (Jerd.), Hume & Henders. Lahore to Yark. p. 300, pl. 32 (1873); Scully, Str. F. iv. p. 203 (1876).

*Larus brunneicephalus*, Severtz. Ibis, 1883, p. 77.

*Chroicocephalus brunneicephalus*, Prjev. in Rowley's Orn. Misc. iii. p. 109 (1878).

Dr. Henderson says that this Gull was very abundant in July, at an elevation of about 15,000 feet, in a small stream running down from Chagra into the Pangong Lake. When the Expedition returned in October the majority had disappeared.

Dr. Scully writes:—"A few birds of this species were observed at Káshghar in winter (November and December) fishing over the streams and ponds; and again in January near Sughlak. The Turki name of this Gull is "*Ghorki*."

309. **LARUS RIDIBUNDUS.**

*Xema ridibunda* (L.); Hume & Henders. Lahore to Yark. p. 301 (1873).

*Larus ridibundus*, Blanf. East. Persia, ii. p. 292 (1876); Dresser, Ibis, 1876, p. 415; Scully, Ibis, 1881, p. 594; id. J. A. S. Beng. lvi. p. 88 (1887).

*Gavia ridibunda*, Severtz. Turkest. Jevotn. p. 70 (1873).

Dr. Henderson says that thousands of this species were fishing in the Wular Lake, Kashmir, in November 1870.

310. **LARUS ARGENTATUS.**

*Larus argentatus*, Severtz. Turkest. Jevotn. p. 70 (1873); Hume & Henders. Lahore to Yark. p. 299 (1873); Blanf. East. Persia, ii. p. 290 (1876).

*Larus leucophæus*, Dresser, Ibis, 1876, p. 415.

Dr. Henderson obtained two specimens early in November in the Wular Lake, Kashmir.

Genus **STERNA.**

311. **STERNA TIBETANA.**

*Sterna fluviatilis*, Hume & Henders. Lahore to Yark. p. 303 (1873); Scully, Str. F. iv. p. 203 (1876).

*Sterna tibetana*, Saunders, P. Z. S. 1876, p. 649.

? *Sterna hirundo*, Severtz. Ibis, 1883, p. 77.

Nos. 1704, 1785, 1787. Yarkand, May 21-25, 1874.—Iris red.

In his 'Diary' Dr. Stoliczka mentions his finding this Tern breeding in a jheel near Yarkand in May.

Dr. Henderson found the species very abundant in August in Yarkand, and he also met with it at Lukung near the Pangong Lake, in which neighbourhood it also probably breeds.

Dr. Scully writes:—"This Tern arrives in the plains of Eastern Turkestan in April, and migrates about September; it breeds in June. This species was exceedingly numerous about Yarkand, fishing over pools, marshes, rice-fields, and inundated fields; its principal food seems to consist of a small fish which occurs very plentifully in Kashgharia, called "*Tini balik*.' This bird has a harsh shrill cry, and is called in Turki '*Balakchi*,' the 'Fisher.'"

312. **STERNA MINUTA.**

*Sternula minuta* (L.); Hume & Henders. Lahore to Yark. p. 303 (1873); Severtz. Turkest. Jevotn. p. 70 (1873); Blanf. East. Persia, ii. p. 294 (1876); Scully, Str. F. iv. p. 204 (1876); Dresser, Ibis, 1876, p. 416.

*Sterna minuta*, Scully, J. A. S. Beng. lvi. p. 88 (1887).

Common in Yarkand, according to Dr. Henderson.

"This Tern," says Dr. Scully, "was frequently observed throughout the months of June and July in the neighbourhood of Yarkand. It associated with *Sterna tibetana*, but was very much less numerous than that species. It is a seasonal visitant only to Eastern Turkestan, arriving about May and leaving certainly before the beginning of October. It breeds in Kashgharia, where it is known by the name of '*Balakchi*,' the 'Fisher.'"

Genus **HYDROCHELIDON.**

313. **HYDROCHELIDON HYBRIDA.**

*Hydrochelidon indica*, Hume & Henders. Lahore to Yark. p. 301 (1873); Prjev. in Rowley's Orn. Misc. iii. p. 145 (1878).

*Hydrochelidon leucopareius*, Severtz. Turkest. Jevotn. p. 70 (1873).

*Hydrochelidon hybrida*, Dresser, Ibis, 1876, p. 416; Saunders, P. Z. S. 1876, p. 640; Blanf. East. Persia, ii. p. 294 (1876); Bidd. Ibis, 1881, p. 102; Scully, t. c. p. 594.

Nos. 180, 181. Wular Lake, near Srinagar, July 26, 1873.

Nos. 208, 211. Srinagar, July 29, 1873.

Dr. Stoliczka's 'Diary' contains a note on the 26th of July, on the breeding of this Tern on the Wular Lake, where he found nests with one or two eggs. "Sometimes it is said to lay three; but men assured me there are already many young, and this is perhaps a case of late breeding."

Dr. Henderson states that this species was very common in Kashmir in June, breeding close to Srinagar.

## Order LIMICOLÆ.

## Family PARRIDÆ.

Genus **HYDROPHASIANUS.**314. **HYDROPHASIANUS CHIRURGUS.**

*Hydrophasianus sinensis* (Gm.) ; Hume & Henders. Lahore to Yark. p. 290 (1873).

Nos. 171-174, 176. Wular Lake, Kashmir, July 26, 1873.

No. 252, ♂. Srinagar, August 3, 1873.—Length 21 inches, wing 9·4, tail 10·45, tarsus 2; expanse 28. Iris dark brown; beak bluish; feet pale bluish, with a slight green tinge, claws horny.

Dr. Stoliczka records in his 'Diary' that on the 26th of August he shot a number of this species, and found the eggs. The nest is only a few water-reeds put together at the surface of the water, and the thing can scarcely be called a nest. There were three eggs. Dr. Henderson states that it was very abundant near Banihál.

## Family CHARADRIIDÆ.

Genus **CHARADRIUS.**315. **CHARADRIUS FULVUS.**

*Charadrius longipes*, Temm.; Hume & Henders. Lahore to Yark. p. 284 (1873); Prjev. in Rowley's Orn. Misc. ii. p. 434 (1877); Bidd. Ibis, 1881, p. 94; Scully, t. c. p. 586.

Not a single specimen of the Asiatic Golden Plover is in the collection, but Dr. Henderson found it very abundant in the vicinity of Yarkand in August, when the specimens still retained some of the breeding-plumage.

Genus **SQUATAROLA.**316. **SQUATAROLA HELVETICA.**

*Squatarola helvetica* (Gm.) ; Scully, Str. F. iv. p. 184 (1876); Blanf. East. Persia, ii. p. 278 (1876); Dresser, Ibis, 1876, p. 327.

*Charadrius squatarola*, Severtz. Turkest. Jevotn. p. 69 (1873).

Dr. Scully says :—"Two specimens of the Grey Plover were shot near running water between the Fort and City of Káshghar in November. It was never noticed in the country at any other time, and I have no information about it. In common with several other Plovers it is called in Turki 'Chullok.'"

Genus **ÆGIALITIS.**

317. **ÆGIALITIS CANTIANUS.**

*Ægialophilus cantianus*, Scully, Str. F. iv. p. 185 (1876).

*Ægialitis cantianus*, Severtz. Turkest. Jevotn. p. 69 (1873); Blanf. East. Persia, ii. p. 279 (1876); Dresser, Ibis, 1876, p. 328; Prjev. in Rowley's Orn. Misc. ii. p. 435 (1877); Bidd. Ibis, 1881, p. 94.

No. 1810. Kárgchalik, May 29, 1874.

Dr. Scully's note is as follows:—"The Kentish Ring-Plover is a seasonal visitant to the plains of Eastern Turkestan, arriving about the end of March, and disappearing entirely in winter. It frequents stony ground and efflorescent wastes, always in the neighbourhood of shallow pools of water. When disturbed it appears to take only short flights, but runs very nimbly over the ground. The Turki name given to this species is '*Chullok*;' it is also sometimes called '*Sai Yamghurchi*,'—Yamghurchi being the exact Turki equivalent of '*pluvialis*,' and Sai meaning a stony steppe."

318. **ÆGIALITIS DUBIA.**

*Ægialitis dubia* (Scop.); Sharpe, Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 89 (1889).

*Ægialitis minor*, Severtz. Turkest. Jevotn. p. 69 (1873).

*Ægialitis fluviatilis*, Scully, Str. F. iv. p. 185 (1876); Blanf. East. Persia, ii. p. 279 (1876).

*Ægialitis philippensis*, Bidd. Ibis, 1881, p. 94.

*Ægialitis curonica* (Gm.); Dresser, Ibis, 1876, p. 328; Prjev. in Rowley's Orn. Misc. ii. p. 435 (1877); Scully, Ibis, 1881, p. 587; id. J. A. S. Beng. lvi. p. 87 (1887).

No. 1709. Yarkand, May 22, 1874.

Dr. Scully writes:—"This species, like the last, is, I believe, only a seasonal visitant to the plains; however, I cannot quite make out how the young bird I got at Káshghar in December came to be there at that time. This Plover arrives towards the end of March, and migrates about September. It was common in the neighbourhood of Yarkand in summer, and was found in the Karakásh Valley at an elevation of about 12,000 feet towards the end of August. It was usually seen in small flocks, feeding on insects in the vicinity of swampy ground. The bird breeds in May, laying, I was informed, three or four eggs on the bare ground at some distance from water. This species is called by the Yarkandis '*Shaiarak Chullok*.'"

319. **ÆGIALITIS MONGOLICUS.**

*Ægialitis mongolicus* (Pall.); Hume & Henders. Lahore to Yark. p. 285 (1873); Blanf. East. Persia, ii. p. 279 (1876).

*Eudromias mongolicus*, Severtz. Turkest. Jevotn. p. 69 (1873); Dresser, Ibis, 1876, p. 327.

No. 1609, ♀. Sarikol, May 9, 1874.—Length 7·9 inches, wing 5·32, tail 2·2, tarsus 1·35.

Iris brown; bill black; feet ashy black, more silvery ashy on the tarsi than on the toes.

Ovary contained one large and several smaller eggs. Would have laid in about a week.

No. 1610, ♂.—Length 7·6 inches, wing 5·15, tail 2·1, tarsus 1·35. Not common; passing through.

Nos. 1603, 1648, 1651. Sarikol, May 9 and 10, 1874.

Dr. Stoliczka states in his 'Diary' that this species was not uncommon at Sarikol, and apparently bred in the neighbourhood. Colonel Biddulph states that he met with this species at Tashkúrghán on the 8th of May. Dr. Henderson writes:—"This species was first met with on the 19th of July at the hot springs above Gokra, at an elevation of 16,000 feet. A few were seen on the Salt Plain on the 29th of July, and after that the birds were found in pairs all along the Karakásh River. They were not very numerous, but a certain number of pairs were met with each day. Not a single bird was seen on the return journey in September and the early part of October. Gokra was reached on the 5th of that month, so that ere this the young birds must have been sufficiently advanced to leave along with the parents for our distant Indian coasts."

Genus **VANELLUS**.320. **VANELLUS CRISTATUS**.

*Vanellus cristatus* (Meyer); Severtz. Turkest. Jevotn. p. 69 (1873); Hume & Henders. Lahore to Yark. p. 286 (1873); Scully, Str. F. iv. p. 186 (1876); Blanf. East. Persia, ii. p. 280 (1876); Prjev. in Rowley's Orn. Misc. ii. p. 433 (1877); Zarudn. Ois. Transcasp. p. 68 (1885); Scully, J. A. S. Beng. lvi. p. 87 (1887); Sharpe, Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 88 (1889).

*Vanellus vulgaris*, Bechst.; Dresser, Ibis, 1876, p. 328; Bidd. Ibis, 1881, p. 94; Scully, ibid. p. 587.

Nos. 994, 1042. Yarkand, November 10-27, 1873.

Nos. 1129, 1130. Káshghar, December 10, 1873.

No. 1223. Káshghar, January 22, 1874.

No. 1778. Yarkand, May 24, 1874.

Colonel Biddulph writes:—"Not very common. I shot single birds at Sanju and Káshghar, and saw others, but never in flocks, whilst travelling about the plains country. I did not notice them in the hills."

Dr. Henderson obtained specimens in the plains between Kárghalik and the city of Yarkand. He says that they seemed to be very abundant in all marshy places throughout the plains of Yarkand.

"The Lapwing," writes Dr. Scully, "was exceedingly common in the plains from March to December, but was not observed in January or February. It frequented marshy ground and the vicinity of streams, generally in flocks. It breeds in April and May; and I noticed in the beginning of June that these birds often circled round and round over one piece of grass, uttering their plaintive cry and evidently solicitous about their young. The Turki name for the Peewit is '*Cheman*' (i. e. 'Chaman,' Persian, 'walking haughtily')."

Near Yarkand Dr. Stoliczka found the Lapwing breeding, and procured young birds on the 27th of May, which were fully a week old.

Genus **CHETTUSIA**.321. **CHETTUSIA GREGARIA**.

*Vanellus gregarius*, Pall.; Severtz. Turkest. Jevotn. p. 69 (1873).

*Chettusia gregaria*, Dresser, Ibis, 1876, p. 328; Bidd. Ibis, 1881, p. 95; Scully, t. c. p. 587; Zarudn. Ois. Transcasp. p. 68 (1885).

No. 1457. Panjah, April 13, 1874.

"Saw four of them."



Genus **LOBIVANELLUS**.

322. **LOBIVANELLUS INDICUS**.

*Lobivanellus indicus* (Bodd.) ; Blanf. East. Persia, ii. p. 281 (1876) ; Bidd. Ibis, 1881, p. 95.

Nos. 239, 242. Srinagar, August 1, 1873.

Family **GLAREOLIDÆ**.

Genus **GLAREOLA**.

323. **GLAREOLA PRATINCOLA**.

*Glareola pratincola* (L.) ; Severtz. Turkest. Jevotn. p. 69 (1873) ; Dresser, Ibis, 1876, p. 328 ; Blanf. East. Persia, ii. p. 282 (1876).

No number. Sarikol, May 9, 1874.—Bill black, coral-red at lower and lateral base and angle ; feet ashy brown ; iris brown. Length 10·1 inches, wing 7·6, tail 4·0, tarsus 1·25.

No number. Sarikol, May 9, 1874.

A pair killed on the large plain ; they were sitting on the grass near water.

Family **SCOLOPACIDÆ**.

Genus **STREPSILAS**.

324. **STREPSILAS INTERPRES**.

*Strepsilas collaris*, Severtz. Turkest. Jevotn. p. 69 (1873).

*Strepsilas interpres* (L.) ; Blanf. East. Persia, ii. p. 281 (1876) ; Dresser, Ibis, 1876, p. 328.

No number. Nubra Valley, October 1873 (*Dr. Bellew*).

Genus **CALIDRIS**.

325. **CALIDRIS ARENARIA**.

*Calidris arenaria*, Scully, Str. F. iv. p. 188 (1876) ; Blanf. East. Persia, ii. p. 283 (1876).

Dr. Scully states that a specimen of the Sanderling was shot at Sughuchak, near Yarkand, in October ; about half a dozen of these birds were observed on the same day on the borders of swamps, associated with *Tringa subarquata*.

The bird is called "*Yamghurchi*" by the Yarkandis, and is said to breed in Kashgharia, migrating southwards in winter.

Genus **TOTANUS.**326. **TOTANUS CANESCENS.**

*Totanus glottis*, Hume & Henders. Lahore to Yark. p. 290 (1873) ; Severtz. Turkest. Jevotn. p. 69 (1873) ;  
 Prjev. in Rowley's Orn. Misc. iii. p. 88 (1878) ; Bidd. Ibis, 1881, p. 97 ; Scully, t. c. p. 589.  
*Totanus canescens*, Scully, Str. F. iv. p. 189 (1876) ; Dresser, Ibis, 1876, p. 411.

No. 604. Leh, August 31, 1873.

No. 740. East of Tanksi, September 18, 1873.

Dr. Henderson obtained a specimen on the 1st of September close to the city of Yarkand itself.

Dr. Scully observes :—"The Yarkandi bird-catchers give the following account of this species : It is always found either near running water or near pools and swamps ; it disappears entirely in winter, but breeds in Eastern Turkestan in summer ; the nest is placed in short grass in the midst of water and the eggs are nearly as large as a pigeon's. The Turki name for the Greenshanks is '*Mashak yamghurchi*,' which may be rendered in French by 'Chat pluvier.'"

327. **TOTANUS CALIDRIS.**

*Totanus calidris*, Severtz. Turkest. Jevotn. p. 69 (1873) ; Dresser, Ibis, 1876, p. 412 ; Scully, Str. F. iv. p. 189 (1876) ; Blanf. East. Persia, ii. p. 285 (1876) ; Prjev. in Rowley's Orn. Misc. iii. p. 88 (1878) ; Bidd. Ibis, 1881, p. 97 ; Scully, *ibid.* p. 589.

No. 1017. Yarkand, November 13, 1873.

No. 1025. Yarkand, November 14, 1873.

No. 1049. Yarkand, November 23, 1873.

No. 1809. Kárghalik, May 29, 1874.

No. 1813. Kárghalik, May 29, 1874.—With the eggs.

Dr. Scully gives the following note :—"The first specimen of the Redshank was obtained at Káshghar in November, where it was tolerably common. After that it was not met with until March ; and in May and June this species swarmed everywhere near water in the vicinity of Yarkand. The bird was also found in the valley of the Karakásh towards the end of August."

Dr. Stoliczka found it breeding near Yarkand on the 22nd of May, and on the 29th of May, writing from Kárghalik, notes in his 'Diary' :—"I also found the nest of *Totanus calidris*, a very loose structure of old grass or dry reeds, in water about a foot deep ; nest with seven eggs. Young fully developed and would have been hatched in a couple of days."

328. **TOTANUS FUSCUS.**

*Totanus fuscus* (L.) ; Severtz. Turkest. Jevotn. p. 69 (1873) ; Blanf. East. Persia, ii. p. 285 (1876) ; Dresser, Ibis, 1876, p. 411 ; Prjev. in Rowley's Orn. Misc. iii. p. 88 (1878).

No. 1600. Sarikol, May 9, 1874.

A specimen putting on the full black plumage, but still with considerable remains of winter plumage.

329. TOTANUS GLAREOLA.

*Totanus glareola*, L.; Severtz. Turkest. Jevotn. p. 69 (1873); Dresser, Ibis, 1876, p. 412; Blanf. East. Persia, ii. p. 285 (1876); Prjev. in Rowley's Orn. Misc. iii. p. 88 (1878); Scully, Ibis, 1881, p. 589; Zarudn. Ois. Transcasp. p. 69 (1885).

*Actitis glareola*, Bidd. Ibis, 1881, p. 96.

No. 826. Sháhídúla, October 19, 1873.

No. 1005. Yarkand, November 11, 1873.

330. TOTANUS OCHROPUS.

*Actitis ochropus* (L.); Hume & Henders. Lahore to Yark. p. 289 (1873); Severtz. Turkest. Jevotn. p. 69 (1873); Dresser, Ibis, 1876, p. 412; Scully, Str. F. iv. p. 188 (1876); Blanf. East. Persia, ii. p. 285 (1876); Prjev. in Rowley's Orn. Misc. iii. p. 87 (1878); Bidd. Ibis, 1881, p. 96.

*Totanus ochropus*, Scully, Ibis, 1881, p. 589; Zarudn. Ois. Transcasp. p. 70 (1885); Scully, J. A. S. Beng. lvi. p. 87 (1887); Sharpe, Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 89 (1889).

No. 240. Srinagar, August 1, 1873.

No. 467. Kargil, Ladák, August 19, 1873.

No. 632, ♀ imm. Leh, September 5, 1873.—Iris dark brown; bill greenish horny black; feet greenish, with a slight bluish tinge. Length 9·6 inches, wing 3·5, tail 2·25, tarsus 1·5.

No. 670. Leh, September 10, 1873.

No. 737. East of Tanksi, September 18, 1873.

No. 1014. Yarkand, November 13, 1873.—“Belakchi.”

No. 1284. Káshghar, January 31, 1874.

“This species,” says Dr. Scully, “was very common near Káshghar during the first half of the winter, and was often seen at Yarkand near streams, pools, and swamps from March to August. During the latter month it was met with in suitable localities in the hills up to about 13,000 feet. In common with so many other waders, it is called by the Kashgharians ‘*Yamghurchi*,’ ‘the rainy one’ (*Pluvialis*); but the professional bird-catchers of the country distinguished it as ‘*Zagharak*.’”

Genus **TRINGOIDES.**

331. TRINGOIDES HYPOLEUCUS.

*Totanus hypoleucus*, Severtz. Turkest. Jevotn. p. 69 (1873); Dresser, Ibis, 1876, p. 411.

*Actitis hypoleucus* (L.); Hume & Henders. Lahore to Yark. p. 289 (1873); Scully, Str. F. iv. p. 188 (1876).

*Tringoides hypoleucus*, Blanf. East. Persia, ii. p. 285 (1876); Prjev. in Rowley's Orn. Misc. iii. p. 89 (1878); Wardlaw Ramsay, Ibis, 1880, p. 71; Bidd. Ibis, 1881, p. 97; Scully, ibid. p. 589; Zarudn. Ois. Transcasp. p. 70 (1885); Scully, J. A. S. Beng. lvi. p. 87 (1887).

No. 316. Sonámarg, August 10, 1873.

No. 951. Bora, November 11, 1873.

According to Dr. Scully, the “Common Sandpiper was not obtained in the plains of Kashgharia, but was often observed on the return journey in August near the pebbly banks

of the Arpalák and Sanju streams. Further up, in the mountains, it was seen daily along the banks of the Karakásh river and on small swamps near that stream. The occurrence of the young bird, noted above, at Gulgun Shah seems to prove that this species breeds in Eastern Turkestan."

Genus **HIMANTOPUS.**

332. **HIMANTOPUS MELANOPTERUS.**

*Hypsibates himantopus*, Severtz. Turkest. Jevotn. p. 69 (1873).

*Himantopus intermedius*, Blyth; Scully, Str. F. iv. p. 190 (1876).

*Himantopus candidus*, Blanf. East. Persia, ii. p. 286 (1876); Dresser, Ibis, 1876, p. 329; Prjev. in Rowley's Orn. Misc. iii. p. 89 (1878); Bidd. Ibis, 1881, p. 99; Scully, ibid. p. 590; id. J. A. S. Beng. lvi. p. 87 (1887).

Dr. Scully writes:—"The Stilt is a seasonal visitant to the plains of Eastern Turkestan, where it breeds. It arrives in May and probably leaves about the end of September; it was never seen in winter. Near Yarkand in summer the birds were found in enormous numbers, frequenting small salt pools, little lakes, and marshy ground. In June I noticed that when these birds were disturbed they used to hover over one and could therefore be very easily shot. The cry of this bird is a kind of plaintive, but shrill sound, something like *crèk, crèk*; in flying about they were often mixed up with the Terns, *Sterna fluviatilis* and *Sternula minuta*. The Turki name for this species is 'Kakhshal pachak,' 'Stilt' (?) leg."

Genus **MACHETES.**

333. **MACHETES PUGNAX.**

*Philomachus pugnax* (L.); Hume & Henders. Lahore to Yark. p. 287 (1873).

*Machetes pugnax*, Severtz. Turkest. Jevotn. p. 69 (1873); Dresser, Ibis, 1876, p. 410; Bidd. Ibis, 1881, p. 96; Scully, t. c. p. 588; Zarudn. Ois. Transcasp. p. 70 (1885); Scully, J. A. S. Beng. lvi. p. 87 (1887).

*Tringa pugnax*, Blanf. East. Persia, ii. p. 284 (1876).

No. 1524. Panjah, April 14-23, 1874.

Dr. Henderson states that this species was very common in the immediate neighbourhood of the city of Yarkand, where they undoubtedly breed.

Genus **TRINGA.**

334. **TRINGA SUBARQUATA.**

*Tringa subarquata* (Gm.); Hume & Henders. Lahore to Yark. p. 288 (1873); Severtz. Turkest. Jevotn. p. 69 (1873); Dresser, Ibis, 1876, p. 411; Scully, Str. F. iv. p. 187 (1876); Blanf. East. Persia, ii. p. 284 (1876); Prjev. in Rowley's Orn. Misc. iii. p. 90 (1878); Bidd. Ibis, 1881, p. 96; Zarudn. Ois. Transcasp. p. 70 (1885).

No. 830. Upper Karakásh, October 1873 (*Colonel Biddulph*).

Dr. Henderson says that this species was common in the marshes in the immediate neighbourhood of Yarkand. Dr. Scully shot two specimens in October, in marshy ground, west of Yarkand, where it was common. It is said by him to breed in Eastern Turkestan, migrating in winter towards India. Called by natives of Khokand, "*Kugnak*."

335. *TRINGA ALPINA*.

*Tringa cinclus*, Scully, Str. F. iv. p. 187 (1876); Blanf. East. Persia, ii. p. 283 (1876).

*Tringa alpina*, L.; Dresser, Ibis, 1876, p. 411; Seebohm, Geogr. Distr. Charadr. p. 425 (1888).

*Tringa variabilis*, Severtz. Turkest. Jevotn. p. 69 (1873).

Dr. Scully says:—"This species was obtained at Káshghar, where it was not very common, in October. It is said to breed in Eastern Turkestan and to disappear entirely in winter, migrating, it is believed, to India."

336. *TRINGA TEMMINCKII*.

*Tringa temminckii* (Leisl.); Hume & Henders. Lahore to Yark. p. 289 (1873); Severtz. Turkest. Jevotn. p. 69 (1873); Dresser, Ibis, 1876, p. 411; Prjev. in Rowley's Orn. Misc. iii. p. 90 (1878); Bidd. Ibis, 1881, p. 96; Scully, t. c. p. 589; Zarudn. Ois. Transcasp. p. 70 (1885).

No. 633, ♂. Leh, September 5, 1873.—Bill greenish at base, blackish towards the tip; feet greenish, dusky on the toes. Length 5·75 inches, wing 4·0, tail 1·8, tarsus 0·75.

Nos. 645, 654. Leh, September 7-9, 1873.

No. 764. Lukung, September 20, 1873.

No. 862. Gidjik, October 24, 1873.

Nos. 1705, 1712, 1714. Yarkand, May 22, 1874.

Dr. Stoliczka mentions in his 'Diary' that he found "a little Tringa," which should be the above species, breeding in a jheel near Yarkand on the 22nd of May. The only eggs, however, which I could find in the collection appear to be those of *Ægialitis dubia*. Colonel Biddulph shot a specimen at Leh (11,000 feet) on the 7th of September.

337. *TRINGA MINUTA*.

*Tringa minuta*, Leisl.; Severtz. Turkest. Jevotn. p. 69 (1873); Dresser, Ibis, 1876, p. 410; Blanf. East. Persia, ii. p. 284 (1876); Bidd. Ibis, 1881, p. 96; Scully, t. c. p. 588; Zarudn. Ois. Transcasp. p. 70 (1885).

Nos. 1033, 1079, 1080. Yarkand, November 21-28, 1873.

Genus **SCOLOPAX**.

338. *SCOLOPAX RUSTICULA*.

*Scolopax rusticola*, L.; Severtz. Turkest. Jevotn. p. 69 (1873); Blanf. East. Persia, ii. p. 282 (1876); Dresser, Ibis, 1876, p. 330.

*Scolopax rusticula*, Bidd. Ibis, 1881, p. 95; Scully, t. c. p. 588; id. J. A. S. Beng. lvi. p. 87 (1887).

No. 1000. Yarkand, November 11, 1873.



Genus **GALLINAGO.**339. **GALLINAGO SCOLOPACINUS.**

*Gallinago scolopacinus*, Bp.; Scully, Str. F. iv. p. 186 (1876); Blanf. East. Persia, ii. p. 282 (1876); Prjev. in Rowley's Orn. Misc. iii. p. 90 (1878); Bidd. Ibis, 1881, p. 95; Scully, ibid. p. 588; id. J. A. S. Beng. lvi. p. 87 (1887); Sharpe, Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 89 (1889).  
*Scolopax gallinago* (L.); Severtz. Turkest. Jevotn. p. 69; Dresser, Ibis, 1876, p. 330; Zarudn. Ois. Transcasp. p. 70 (1885).

No. 603. Leh, August 31, 1873.

"The Common Snipe," says Dr. Scully, "was tolerably numerous in the neighbourhood of Yarkand in summer, where it was ascertained to breed; the bird was never observed in winter. It was found in the neighbourhood of marshy ground and inundated fields. The Turki name for the Snipe is '*Mahramchi*,' 'the solitary one.'"

340. **GALLINAGO STENURA.**

*Gallinago sthenura* (Bp.); Hume & Marsh. Game Birds Ind. iii. p. 339, pl. (1880).  
*Scolopax stenura*, Seebohm, Geogr. Distr. Charadr. p. 477 (1887).

No. 606. Leh, August 31, 1873.

No. 741. East of Tanksi, September 18, 1873.

341. **GALLINAGO SOLITARIA.**

*Gallinago solitaria* (Hodgs.); Hume & Henders. Lahore to Yark. p. 286 (1873); Prjev. in Rowley's Orn. Misc. iii. p. 91 (1878); Bidd. Ibis, 1881, p. 95; Scully, t. c. p. 588; id. J. A. S. Beng. lvi. p. 87 (1887).

No. 709. Tanksi, September 9, 1873.

Nos. 923, 924. Sanju, November 1, 1873.

Colonel Biddulph writes:—"I shot one on the south side of the Sakti Pass, near Chimray, and we shot several along the stream in the narrow valley (13,500 feet) leading from Tanksi to the Pangong Lake. I also saw one between Sarhad and Panjah in Wakhán."

## Order FULICARIÆ.

## Family OTIDIDÆ.

## Genus OTIS.

## 342. OTIS TETRAX.

*Otis tetrax*, L. ; Severtz. Turkest. Jevotn. p. 68 (1873); Dresser, Ibis, 1876, p. 326; Scully, Str. F. iv. p. 184 (1876); Blanf. East. Persia, ii. p. 287 (1876); Bidd. Ibis, 1881, p. 94; Scully, ibid. p. 586; C. Swinh. Ibis, 1882, p. 119; Severtz. Ibis, 1883, p. 72; Zarudn. Ois. Transcasp. p. 67 (1885); Scully, J. A. S. Beng. lvi. p. 87 (1887).

No. 1096, ♀. Yangihissár, November 30, 1873.—Length 17·5 inches, wing 10·1, tail 4·25, tarsus 5; expanse 35·5; bill from front 1, from gape 1·5; middle toe 1·7. Iris yellow; bill dusky horny above, paler about the middle of culmen, pale at sides and below; feet dusky horny, tarsi pale yellow horny. Wings reach within 1·2 inch of end of tail.

Dr. Scully writes :—"A single specimen of the Little Bustard was obtained at Káshghar in December. The bird is not at all common near Káshghar or Yarkand; but on the road from Kárghalik to Sanju in August, I heard a good deal about it, and at Koshtak I had the characteristic footprints of this bird pointed out to me on the sand. The Turki name for this species is '*Kum tokhosi*,' i. e. 'The Sand Fowl.' "

## Family RALLIDÆ.

## Genus FULICA.

## 343. FULICA ATRA.

*Fulica atra*, L. ; Hume & Henders. Lahore to Yark. p. 293 (1873); Severtz. Turkest. Jevotn. p. 69 (1873); Dresser, Ibis, 1876, p. 413; Scully, Str. F. iv. p. 191 (1876); Blanf. East. Persia, ii. p. 289 (1876); Prjev. in Rowley's Orn. Misc. iii. p. 94 (1878); Bidd. Ibis, 1881, p. 97; Scully, ibid. p. 590; C. Swinh. Ibis, 1882, p. 122; Scully, J. A. S. Beng. lvi. p. 88 (1887); Sharpe, Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 90 (1889).

No. 911. South of Sanju Pass, October 25, 1873.

Dr. Henderson says that the Coot was not uncommon in the Lakes of Kashmir, where it was breeding in May and June. After the Zoji-là was crossed it was only seen in the Indus near Leh.

Dr. Scully writes :—"The Coot is exceedingly common in the plains of Kashgharia from March to October; very few of the birds are to be seen during the winter. It is found on all lakes and jheels; often near springs and small streams. When alarmed it scuds across the water, seldom flying up, but flapping the surface of the water until it can hide among the rushes; it is also a wonderfully good diver. This species breeds in Turkestan in May, June, and July. The Turki name is '*Kashkaldak*,' i. e. 'Bald brow.' "

Genus **GALLINULA**.344. **GALLINULA CHLOROPUS**.

*Gallinula chloropus*, L. ; Hume & Henders. Lahore to Yark. p. 293 (1873) ; Severtz. Turkest. Jevotn. p. 89 (1873) ; Dresser, Ibis, 1876, p. 413 ; Scully, Str. F. iv. p. 192 (1876) ; Blanf. East. Persia, ii. p. 288 (1876) ; Prjev. in Rowley's Orn. Misc. iii. p. 94 (1878) ; Bidd. Ibis, 1881, p. 98 ; Scully, ibid. p. 590.

*Stagnicola chloropus*, Radde, Ornith. iii. p. 496 (1887).

No. 170. Kashmir Lake, July 26, 1873.

No. 237. Srinagar, August 1, 1873.

Srinagar, August 5, 1873.

The Water-hen was only met with by Dr. Henderson in Kashmir, where it was very plentiful about all the lakes, in which it was breeding in June.

Dr. Scully's note is as follows:—"The Water-hen was tolerably common in the plains (of Turkestan) in summer, where it breeds ; it was never met with during the winter. It frequented jheels and swamps, running about with great ease on the fallen rushes floating on the surface of the water ; it was often noticed flirting up its tail, and thus showing the white feathers in it very conspicuously. The Turki name for this species is '*Kodan*,' and it is sometimes called '*Kharonah*' (i. e. *Kharun*, Persian—a restive horse)."

Genus **RALLUS**.345. **RALLUS AQUATICUS**.

*Rallus aquaticus*, L. ; Severtz. Turkest. Jevotn. p. 69 (1873) ; Dresser, Ibis, 1876, p. 412 ; Scully, Str. F. iv. p. 193 (1876) ; Blanf. East. Persia, ii. p. 288 (1876) ; Hume & Marsh. Game Birds of India, ii. p. 261 (1879) ; Bidd. Ibis, 1881, p. 98 ; Scully, ibid. p. 591 ; Zarudn. Ois. Transcasp. p. 66 (1885) ; Scully, J. A. S. Beng. lvi. p. 87 (1887) ; Sharpe, Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 89 (1889).

Dr. Scully observes:—"The Water-Rail was tolerably common near Yarkand in summer ; it was never observed in winter, but some of the shikaris there said that the bird was a permanent resident. It was found in marshes, among the rushes, where it was said to breed. The Turki name for this species is '*Yekan Tokhisi*,' i. e. the Rush Fowl."

Genus **PORZANA**.346. **PORZANA FUSCA**.

*Porzana fusca* (L.) ; Hume & Marsh. Game Birds of India, ii. p. 217, pl. 38. fig. 2 (1879).

*Crex fusca* (L.) ; Seebohm, B. Japan. Emp. p. 357 (1890).

Nos. 207, 209. Srinagar, July 29, 1873.

## 347. PORZANA PUSILLA.

*Porzana pygmæa* (nec Naum.) ; Hume & Henders. Lahore to Yark. p. 293 (1873) ; Scully, Str. F. iv. p. 193 (1876) ; Bidd. Ibis, 1881, p. 98.

*Gallinula pygmæa* (nec Naum.), Severtz. Turkest. Jevotn. p. 69 (1873).

*Porzana bailloni* (V.) ; Dresser, Ibis, 1876, p. 413 ; Hume & Marsh. Game Birds of India, ii. p. 203, pl. 35 (1879) ; Scully, Ibis, 1881, p. 590 ; C. Swinh. Ibis, 1882, p. 123 ; Scully, J. A. S. Beng. lvi. p. 88 (1887).

*Ortygometra pygmæa*, Prjev. in Rowley's Orn. Misc. iii. p. 94 (1878).

*Ortygometra bailloni*, Sharpe, Trans. Linn. Soc. (2) Zool. v. pt. 3, p. 90 (1889).

*Porzana pusilla* (Pall.) ; Grant, Ann. & Mag. Nat. Hist. (6) v. p. 80 (1890).

*Crex pusilla* (Pall.) ; Seebohm, B. Japan. Emp. p. 355 (1890).

No. 808. Aktágh, October 13, 1873.

Dr. Henderson obtained a specimen near Sháhídúla. Dr. Scully writes:—"A single specimen of this species was obtained in marshy ground near the city of Yarkand on the 29th of June. It was not at all common near Yarkand ; but it is probable that a few birds breed there."

## 348. PORZANA MARUETTA.

*Porzana maruetta* (Leach) ; Hume & Henders. Lahore to Yark. p. 293 (1873) ; Dresser, Ibis, 1876, p. 413 ; Scully, Str. F. iv. p. 193 (1876) ; Blanf. East. Persia, ii. p. 288 (1876) ; Hume & Marsh. Game Birds of India, ii. p. 213, pl. 37 (1879) ; Bidd. Ibis, 1881, p. 98 ; Scully, ibid. p. 590 ; id. J. A. S. Beng. lvi. p. 88 (1887).

*Gallinula porzana*, Severtz. Turkest. Jevotn. p. 69 (1873).

A single specimen of this species was obtained by Dr. Henderson at the Karatágh Lake on the Karakoram, at an elevation of over 16,000 feet. "This was on the 24th of September, and the bird was probably on its way southwards. It could not possibly have been anything else but a casual visitor, as the lake lay in perfectly bare shingle, and there was scarcely a vestige of vegetation anywhere about. The bird was easily caught by the hand, and at the same time and place, as already mentioned, a Common Quail was captured. This lake lies almost in the most direct route as the crow flies between Yarkand plains and Leh, and between the nearest points respectively of the Karakásh and Shyok."

Dr. Scully also procured a specimen of the Spotted Crake at Toghrasu on the 21st September, elevation 11,265 feet. The bird was probably migrating southwards.

Mr. Hume adds a note:—"It is very remarkable that the only specimen of this Rail obtained by Dr. Henderson was caught at the Karatágh Lake, at an elevation of 16,000 feet, just 52 miles south of Toghrasu, on the 24th of September."

## Order PYGOPODES.

## Family PODICIPITIDÆ.

Genus **PODICIPES**.349. **PODICIPES MINOR.**

*Podiceps minor* (Gm.) ; Severtz. Turkest. Jevotn. p. 69 (1873) ; Hume & Henders. Lahore to Yark. p. 298 (1873) ; Dresser, Ibis, 1876, p. 413 ; Scully, Str. F. iv. p. 203 (1876) ; Blanf. East. Persia, ii. p. 304 (1876) ; Menzbier, Ibis, 1885, p. 358.

*Podiceps philippensis*, Bidd. Ibis, 1881, p. 101.

*Podiceps fluviatilis*, Scully, Ibis, 1881, p. 593 ; C. Swinh. Ibis, 1882, p. 125.

Nos. 236, 238. Srinagar, August 1, 1873.

The following notes occur in Dr. Stoliczka's 'Diary' :—

"Srinagar, July 26.—Of *Podiceps minor* I got the eggs. The bird makes a heap of mud and water-plants ; it is a rather solid structure, and is about four inches above water. The eggs are dirty white and pointed at both ends.

"Srinagar, July 31.—*Podiceps minor* is breeding a second time, and I got some fresh eggs."

Dr. Henderson obtained several specimens in June in Kashmir. The Little Grebe was observed at Káshghar in November and December by Dr. Scully. The bird was again noticed at Sughuchak in June. The natives assert that the bird breeds near Yarkand, and call it "*Chumighak*," i. e. "the Diver."

350. **PODICIPES CRISTATUS.**

*Podiceps cristatus*, L. ; Severtz. Turkest. Jevotn. p. 70 (1873) ; Dresser, Ibis, 1876, p. 414 ; Scully, Str. F. iv. p. 203 (1876) ; Blanf. East. Persia, ii. p. 304 (1876) ; Prjev. in Rowley's Orn. Misc. iii. p. 108 (1878).

Dr. Scully says :—"The Crested Grebe was numerous in the lakes of Sughuchak, about twelve miles west of Yarkand, in summer, where it was breeding. The birds were so difficult to approach, however, that I only managed to shoot two, and one of those I lost in the thick reeds and rushes into which it fell. The bird was never seen in winter."



## APPENDIX.

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MR. HUME has very generously presented to the India Office some plates of Indian birds, which had been prepared for his contemplated work on the Avifauna of the British Asian Empire. I have therefore availed myself of the opportunity to utilize these plates on the present occasion, as some of them are excellent examples of Mr. Keuleman's work.

### 1. HIEROFALCO SAKER. (Plates XVI.-XIX.)

*Falco sacer*, Gm. Syst. Nat. i. p. 273 (1788).

*Hierofalco saker*, Sharpe, Cat. B. Brit. Mus. i. p. 417 (1874).

I here give a few remarks on the changes of plumage in the Saker Falcon, based upon the material in the Hume Collection :—

*Young male.* General colour above nearly uniform brown, with somewhat of an ashy shade and a slight indication of rufous margins to the feathers of the lower back and rump and upper wing-coverts; the scapulars with a few rounded whitish spots; tail-feathers brown, shaded with ashy and rather broadly tipped with white, and having the inner web barred, and the outer web roundly spotted, with rufous or rufous-white; quills dark brown, the primary-coverts and secondaries with rufescent edges like the scapulars, the primaries dusky below and broadly banded with pale rufous for nearly the entire extent of the inner web, these light bars on the inner web often forming broad triangular notches; crown of head pale tawny rufous, rather broadly streaked with black; the hind neck whitish, with broad centres of dusky brown to the feathers; lores and base of forehead buffy white; a superciliary band of white, narrowly streaked with black, forming an indistinct eyebrow; feathers behind the eye and a broad streak along the upper edge of the ear-coverts dark brown; remainder of the ear-coverts whitish, narrowly lined with black; from below the eye a broad moustachial streak of black obliquely crossing the cheeks to the sides of the throat; the fore part of the cheeks white like the throat; remainder of the under surface of body ochreous buff, very broadly streaked with blackish brown; the upper part of the thighs uniform dark brown, rest of the thighs creamy white, streaked with brown; the upper part of the tarsus also feathered in front; lower abdomen and under tail-coverts creamy buff; the flank-feathers very uniform brown, the feathers being broadly edged externally with sandy buff, while on the inner web of many of them is an ovate spot of sandy buff, indicating a break-up of the pattern of the feather; axillaries brown with twin spots of sandy buff; under wing-coverts also brown, with edgings and spots of sandy buff, the smaller coverts sandy buff streaked with brown, especially near the edge of the wing; lower primary-coverts ashy, like the quill-lining, with twin spots of creamy buff. Total length 20 inches, wing 14·5, tail 8·0, tarsus 2·5.

The above is a description of a young bird from Asia Minor, and specimens in almost identical plumage are in the Hume Collection, obtained in the Sirsa district during the cold weather. It is evident that the more definitely spotted plumage of the chest is gained by a change of pattern in the feathers rather than by a moult, the brown colour becoming disintegrated near the base of the feathers and disappearing gradually, so as to leave a terminal spot of brown; the flank-feathers also undergo considerable alteration in the pattern of the brown colour, which is much encroached upon by the white markings of the inner web. At the same time the head becomes gradually lighter and the brown stripes narrower; the feathers of the upper parts are margined with rufous, and the round spots on the tail are very characteristic. I believe that these spots make their appearance gradually on the tail without a moult, and that they are seen in the first autumn of the bird's life.

Several specimens in the Hume Collection are moulting, and it is interesting to note that, as is often the case with other *Accipitres*, the new feathers on the chest are identical in pattern with those of the worn plumage which preceded them—that is to say, that the brown markings of the chest-plumes have already altered from the longitudinal form to the terminal spot, and that the newly-moulted feathers commence with the latter form. The dorsal plumes are greyish with rufous edges.

The older the bird, the more rufous does it become on its upper surface; the tail shows numerous spots and bars, the former being on the outer web and the latter on the inner web. The centre tail-feathers appear to be more or less uniform, showing a return to the condition of the first plumage.

The following is a list of the specimens now in the Collection of the British Museum:—

<i>a.</i> ♀ juv. sk.	South Hungary.	A. Baron von Hügel.
<i>b.</i> Juv. sk.	Asia Minor.	Old Collection.
<i>c, d.</i> ♂ ad. sk.	River Volga.	Seebohm Coll.
<i>e.</i> ♂ imm. sk.	South Ural.	Dr. R. B. Sharpe [P.].
<i>f.</i> ♂ ad. sk.	Bala Morghab, N. Afghanistan, Dec. 14.	Dr. Aitchison [C.].
<i>g.</i> ♂ ad. sk.	Mehar, Upper Sindh, Jan. 16, 1872 ( <i>A. O. H.</i> ).	Hume Coll.
<i>h-w.</i> Ad. et imm. sk.	Sirsa district, Punjab, Cold Season, 1870-71.	Hume Coll.
<i>x.</i> ♂ ad.; <i>y-d'</i> . ♀ ad. et imm. sk.	Sirsa district, Oct. 1867-70.	Hume Coll.
<i>e'-i'</i> . ♂ ad. et imm. sk.	Sirsa district, Nov. 1869-71.	Hume Coll.
<i>k'</i> . ♀ ad. sk.	Sirsa district, Dec. 21, 1869.	Hume Coll.
<i>l', m', n'.</i> ♂ ♀ ad. sk.	Sirsa district, Jan. 1871-72.	Hume Coll.
<i>o'</i> . ♀ ad. sk.	Sirsa district, Feb. 3, 1870.	Hume Coll.
<i>p', q'.</i> ♂ imm.; <i>r', s'.</i> ♀ ad. et imm. sk.	Sirsa district, March 1870.	Hume Coll.
<i>t'</i> . ♀ imm. sk.	Lahore, Dec. 13, 1869 ( <i>C. H. T. Marshall</i> ).	Hume Coll.
<i>u'</i> . ♀ ad. sk.	Bahawalpur, Nov. 27, 1867 ( <i>C. H. T. M.</i> ).	Hume Coll.
<i>v'</i> . Imm. sk.	Sultānpur, Gurgaon district, Dec. 31, 1878 ( <i>W. N. Chill</i> ).	Hume Coll.
<i>w'</i> . Ad. sk.	Mussooree ( <i>C. Wilson</i> ).	Hume Coll.
<i>x'</i> . ♂ ad. sk.	Dhurous, Mainpuri, Feb. 28, 1876 ( <i>A. Anderson</i> ).	Seebohm Coll.
<i>y', z'.</i> Imm. sk.	Nepal.	Hodgson Coll.

Of the distinctness of *Hierofalco milvipes*, Hodgs. (*H. hendersoni*, Hume), from *H. saker* there can no longer be any question. Unlike *H. saker*, which seems to get lighter on the

head with age, *H. milvipes* appears to get darker on the crown, and the barred appearance on the back and tail readily distinguishes adult birds. Young individuals are more difficult to distinguish, but those of *H. saker* are generally more uniform and those of *H. milvipes* exhibit a tendency to become barred.

The following is a list of the specimens of *H. milvipes* at present in the British Museum:—

<i>a.</i> Ad. sk.	Quetta.	Sir O. St. John [P.].
<i>b.</i> ♂ ad. sk.	Kitchik Yailák, Yarkand, Sept. 14.	Dr. G. Henderson [C.]. (Type of <i>F. hendersoni</i> ).
<i>c.</i> ♀ imm. sk.	Yarkand, Feb. 26, 1875 ( <i>J. Scully</i> ).	Hume Coll.
<i>d.</i> Ad. sk.	Ladák ( <i>Strachey</i> ).	India Museum.
<i>e.</i> Imm. sk.	N.W. Himalayas.	Capt. Pinwill [P.].
<i>f.</i> ♀ ad. sk.	Umballa, Feb. 1867 ( <i>Dr. Scott</i> ).	Tweeddale Coll.
<i>g.</i> Ad. sk.	Nepal.	Hodgson Coll. (Type of <i>Falco milvipes</i> .)
<i>h, i, k.</i> Juv. sk.	Nepal.	Hodgson Coll.
<i>l.</i> Ad. sk.	Tibet, March 1876 ( <i>L. Mandelli</i> ).	Hume Coll.
<i>m.</i> Juv. sk.	Tibet, May 1875 ( <i>L. Mandelli</i> ).	Hume Coll.
<i>n.</i> ♀ Ad. sk.	Koko-nur ( <i>N. Prjevalsky</i> ).	Seebohm Coll.

EXPLANATION OF THE PLATES OF *H. SAKER*.

Plate XVI.	Fig. 1.	♀ juv., Lahore, Dec. 13 ( <i>C. H. T. Marshall</i> ).
	2.	♀ juv., Sirsa district, Cold Season, 1870–71.
XVII.		♀ imm., 2nd year, Sirsa district, Jan. 11, 1871.
XVIII.	Fig. 1.	♀ imm., 2nd year, Sirsa district, Oct. 29, 1870.
	2.	♂ ad., Sirsa district, Nov. 1871.
XIX.	Fig. 1.	♂ ad., Sirsa district, Oct. 17, 1867.
	2.	♀ ad., Sirsa district, March 4, 1870.

2. SCOPS BALLI. (Plate XX.)

*Ephialtes balli*, Hume, Str. F. i. p. 407 (1873).

*Scops balli*, Sharpe, Cat. B. Brit. Mus. ii. p. 100 (1875).

A full description of the type specimen of *S. balli* is given in my 'Catalogue of Birds.' The left-hand figure has been drawn from the typical example, the right-hand from a somewhat younger bird in the Hume Collection, procured in September 1874, in South Andaman.

3. CARINE PULCHRA. (Plate XXI.)

*Athene pulchra*, Hume, Str. F. i. p. 469 (1873), iii. p. 39 (1875).

*Carine pulchra*, Sharpe, Ibis, 1875, p. 258; id. Cat. B. Brit. Mus. ii. p. 140 (1875).

For remarks on the differences between this form and *C. brama*, see the 'Catalogue of Birds' (l. c.). *C. pulchra* is an inhabitant of Upper Burma.

4. *HETEROGLAUX BLEWITTI*. (Plate XXII.)

*Heteroglaux blewitti*, Hume, Str. F. i. p. 467 (1873) ; Ball, Str. F. vii. p. 201 (1878) ; Sharpe, Cat. B. Brit. Mus. ii. p. 141 (1875).

This curious Owl is here figured for the first time. It has the general outward appearance of a *Carine*, but differs in the structure of the nostrils and other features of plumage. It is found in the extreme east of the Central Provinces of India around Sambalpur, &c.

5. *GARRULUS LEUCOTIS*. (Plate XXIII.)

*Garrulus leucotis*, Hume, Str. F. ii. pp. 106, 443, 480 (1874) ; Blyth & Wald. B. Burm. p. 89 (1875) ; Sharpe, Cat. B. Brit. Mus. xiii. p. 99, pl. iv. (1877) ; Oates, Faun. Brit. Ind., Birds, i. p. 39 (1889).

This fine species of Jay appears to be confined to the pine-forests of Burma.

6. *CYANOPS INCOGNITA*. (Plate XXIV.)

*Megalaima incognita*, Hume, Str. F. 1874, pp. 442, 486 ; Wald. in Blyth's B. Burm. p. 74 (1875).

*Megalæma incognita*, Hume & Davison, Str. F. vi. pp. 151, 501 (1878) ; Hume, Str. F. viii. p. 88 (1879) ; Bingham, t. c. p. 194 ; id. Str. F. ix. p. 186 (1880).

*Cyanops incognita*, Oates, Handb. B. Brit. Burm. ii. p. 134 (1883) ; Shelley, Cat. B. Brit. Mus. xix. p. 68, pl. iv. fig. 3 (1891).

This species is only found in Central Tenasserim.

## LIST OF PLATES.

- 
- I. *Hierofalco gyrfalco*.  
 II. *Scops brucii*.  
 III. *Carine bactriana*.  
 IV. *Podoces biddulphi*.  
 V. *Rhodopechys sanguinea*.  
 VI. *Carpodacus stoliczkæ*.  
 VII. *Ægithalus coronatus*.  
 VIII. *Leptopæcile sophiæ*.  
 IX. *Tribura major*.  
 X. *Phylloscopus tytleri*.  
 XI. *Cettia orientalis*.  
 XII. }  
 XIII. } *Dendrocopus leucopterus*.  
 XIV. *Turtur stoliczkæ*.  
 XV. *Tetraogallus himalayensis*.  
 XVI. }  
 XVII. } *Hierofalco saker*.  
 XVIII. }  
 XIX. }  
 XX. *Scops balli*.  
 XXI. *Carine pulchra*.  
 XXII. *Heteroglaux blewitti*.  
 XXIII. *Garrulus leucotis*.  
 XXIV. *Cyanops incognita*.







$\frac{2}{5}$

HIEROFALCO GYRFALCO.





SCOPS BRUCII.





CARINE BACTRIANA.

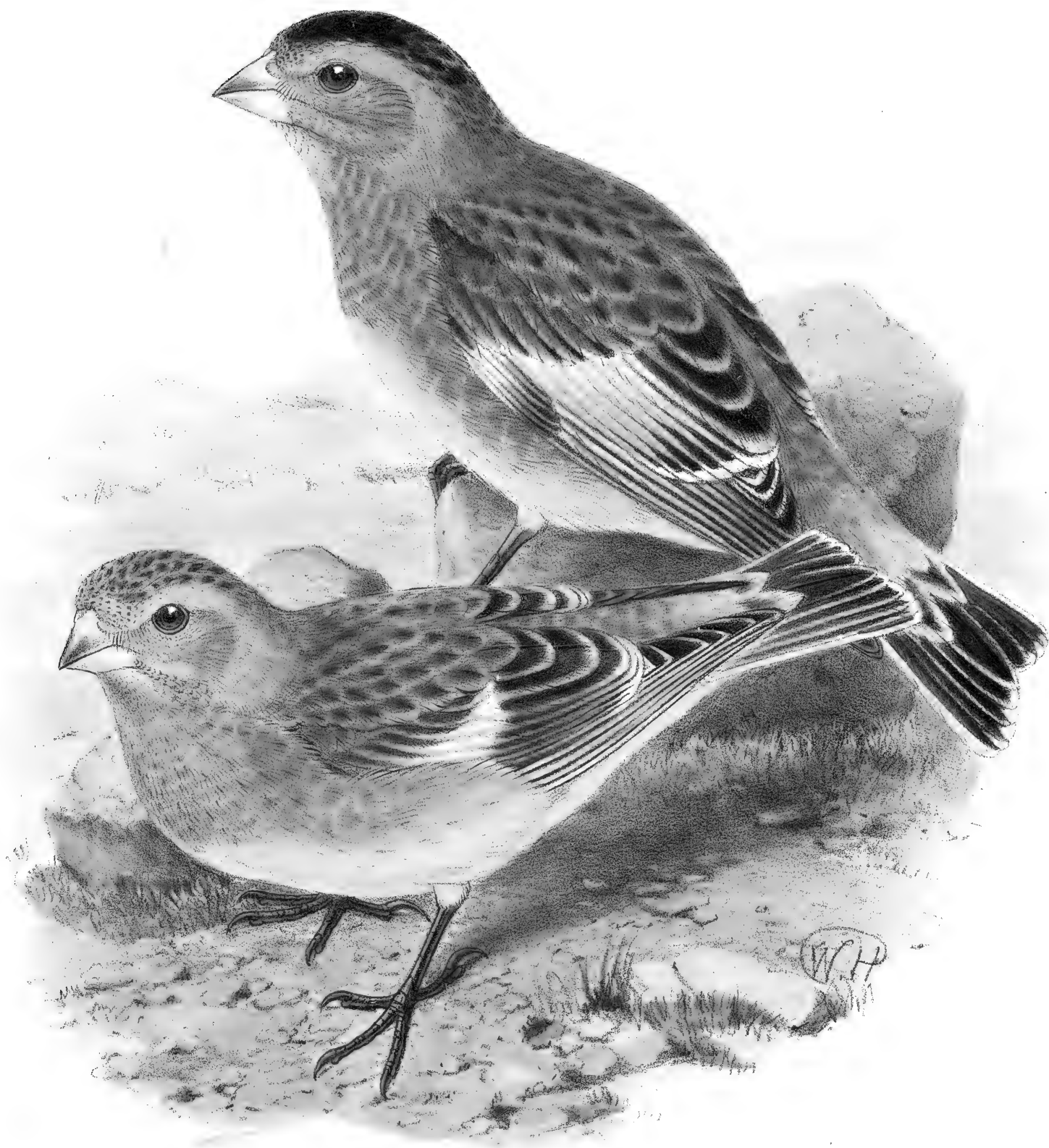






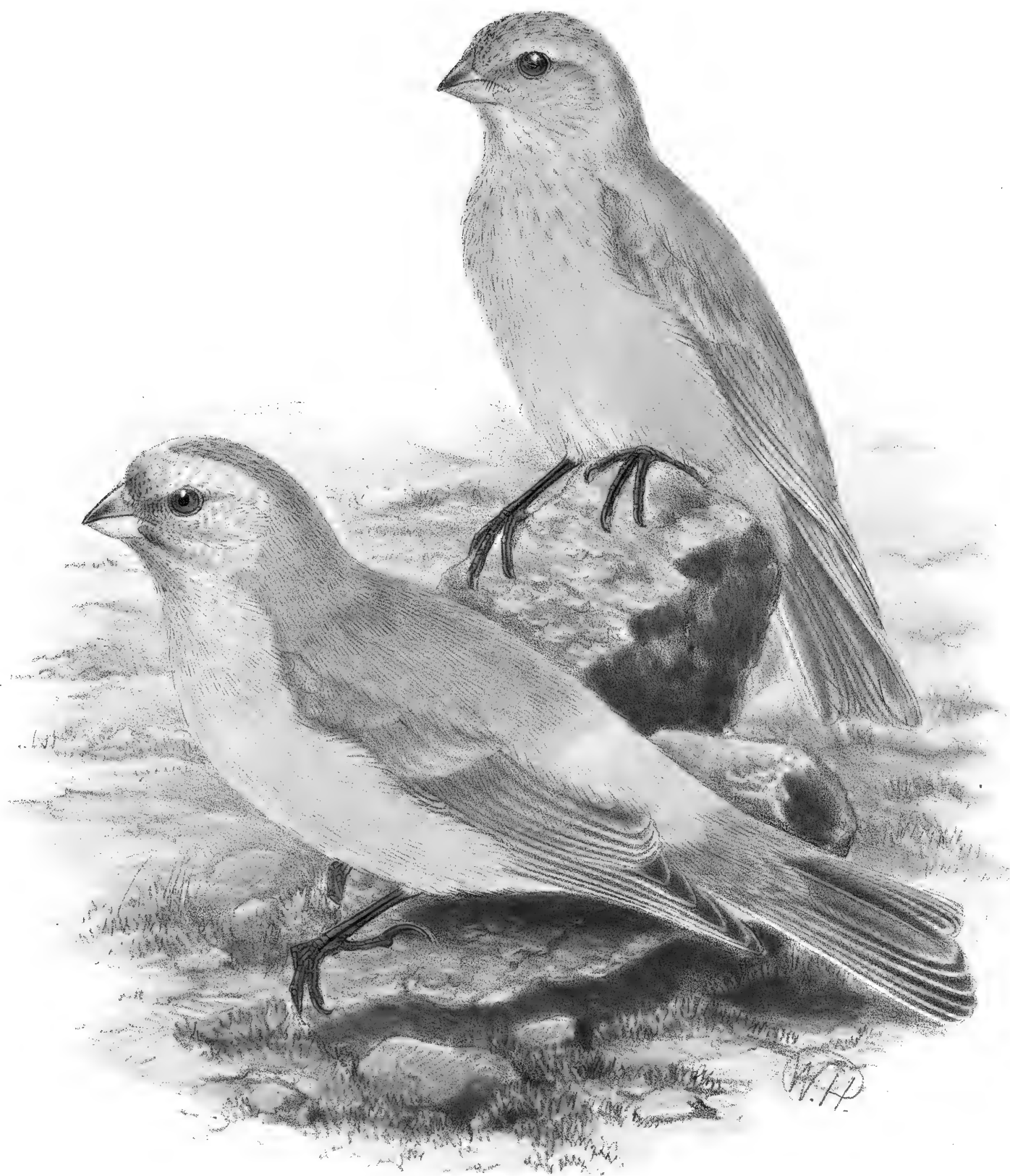
PODOCES BIDDULPHI.





RHODOPECHYS SANGUINEUS.





CARPODACUS STOLICZKÆ.







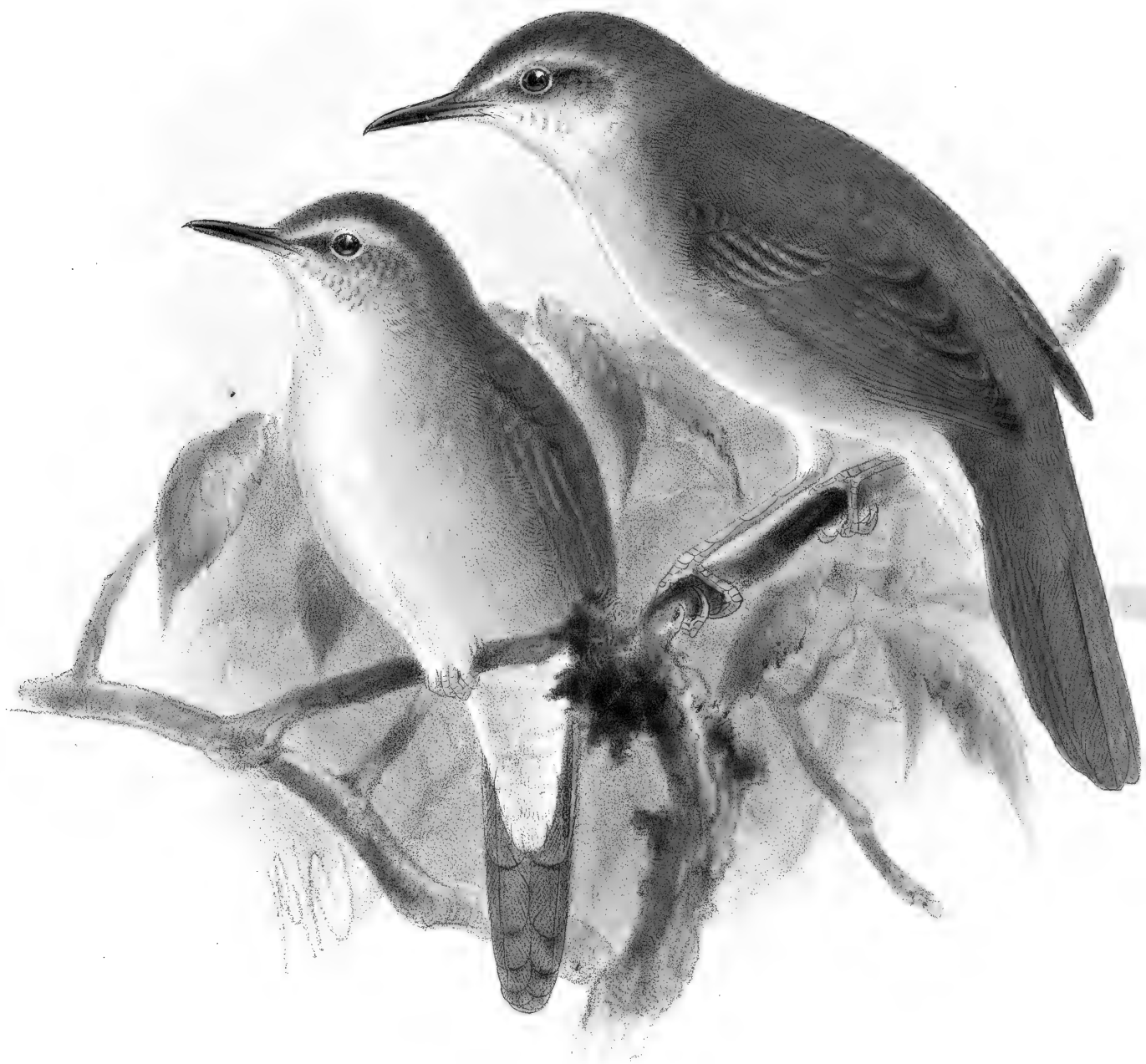
ÆGITHALUS CORONATUS.





LEPTOPÆCILE SOPHIÆ.





TRIBURA MAJOR.







PHYLLOSCOPUS TYTLERI.





CETTIA ORIENTALIS.





DENDROCOPUS LEUCOPTERUS.







DENDROCOPUS LEUCOPTERUS.





TURTUR STOLICZKÆ.





$\frac{1}{2}$

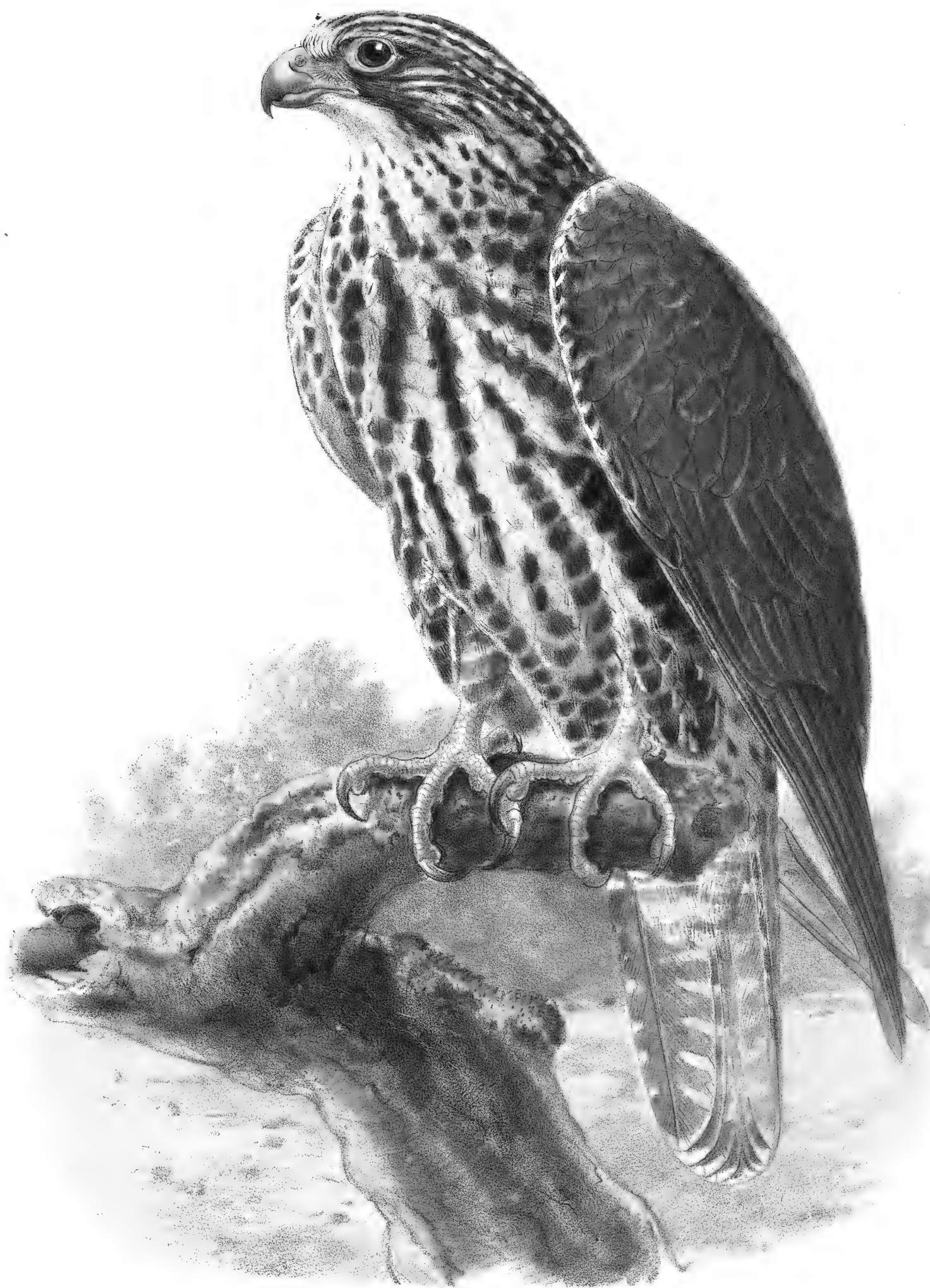
TETRAOGALLUS HIMALAYENSIS.





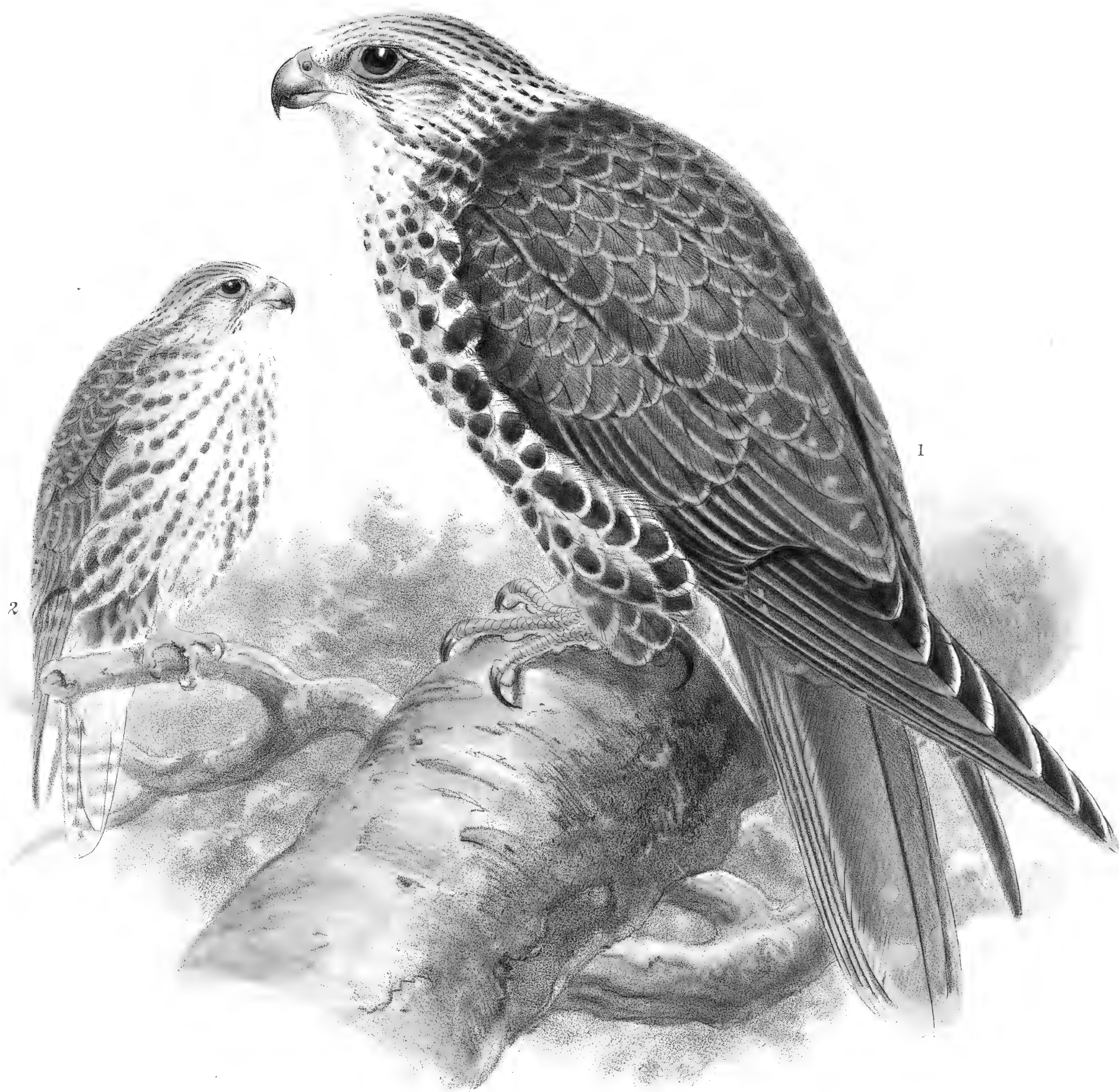












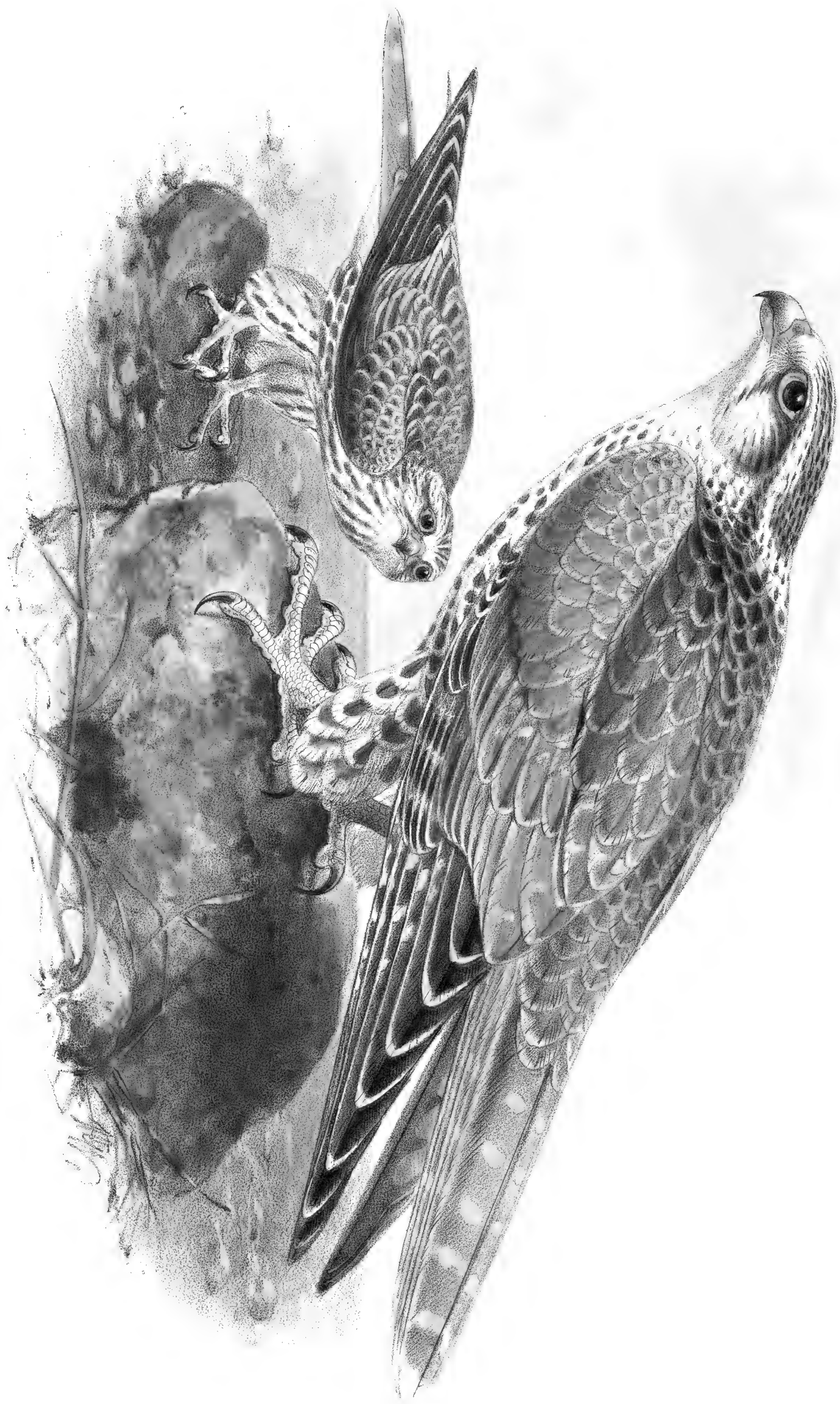
JG Kettemans lith.

Hanhart imp.  
2

HIEROFALCO SAKER.







J. G. Keulemans lith.

HIEROFALCO SAKER.

H. Harhart imp.





SCOPS BALLI.





CARINE PULCHRA.

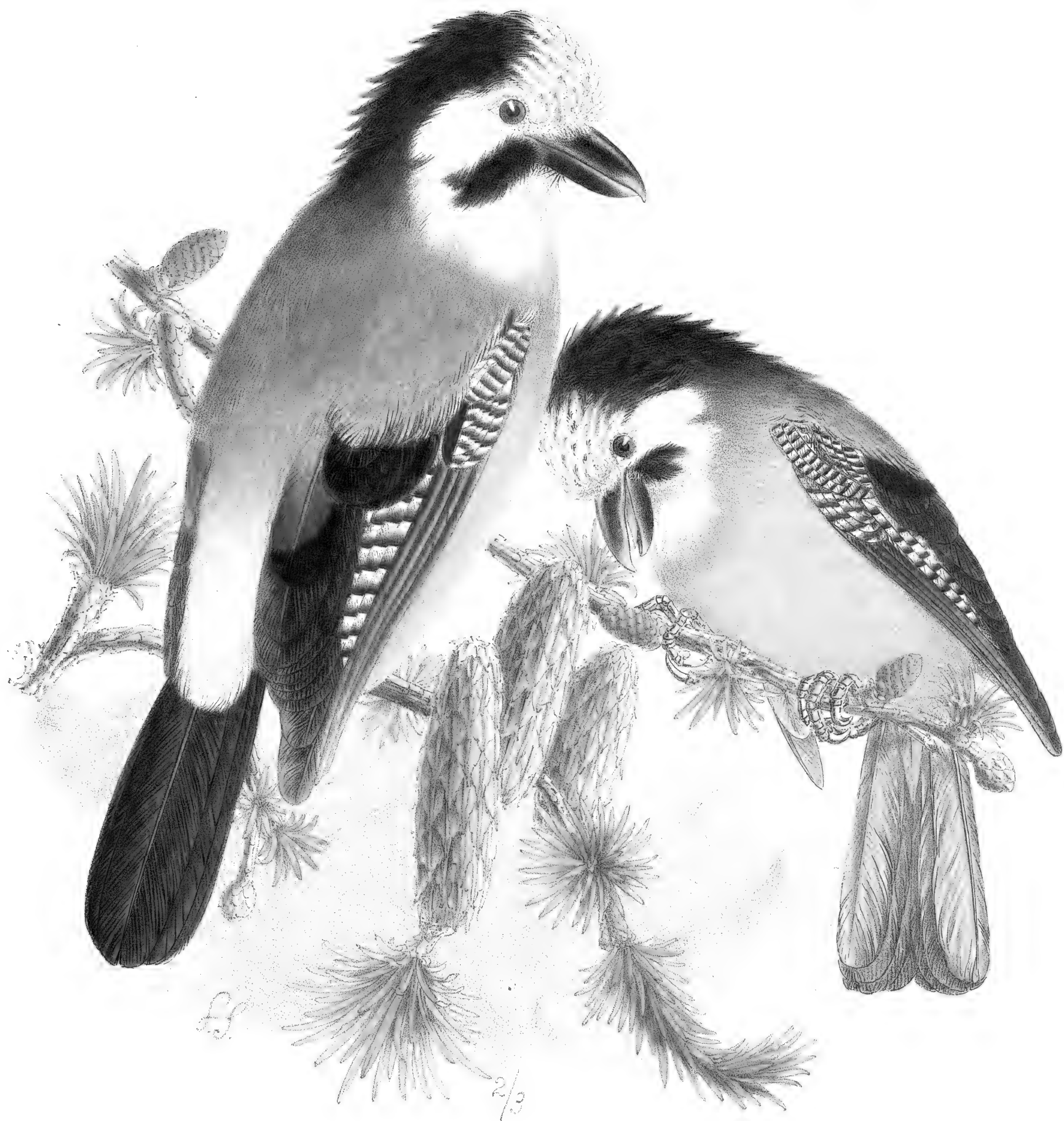






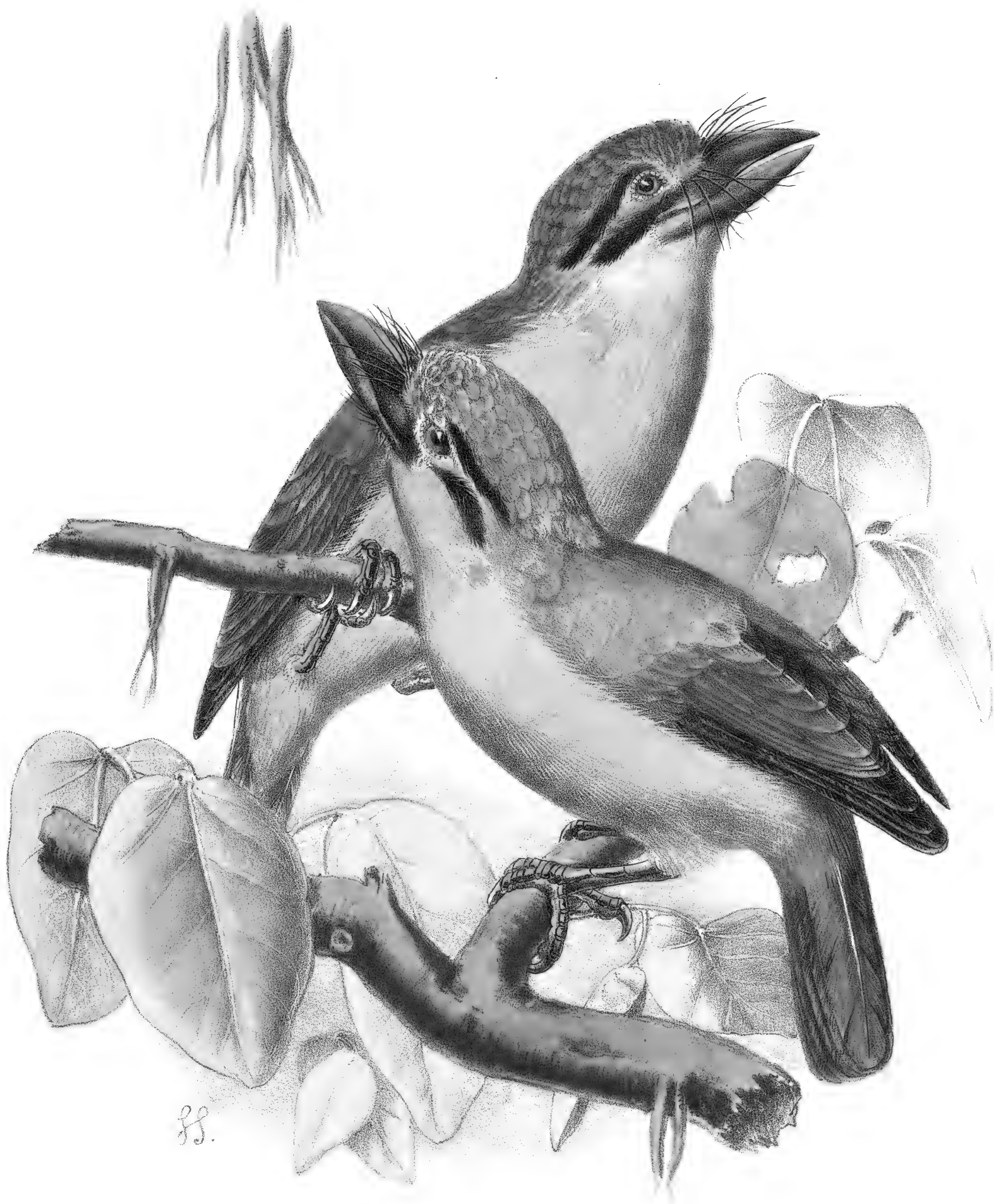
HETEROGLAUX BLEWETTI.





GARRULUS LEUCOTIS.





CYANOPS INCOGNITA.



















